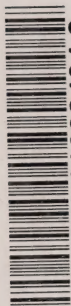


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RESTRICTIVE TRADE PRACTICES COMMISSION

# REPORT

Concerning the Manufacture, Distribution and Sale  
of Metal Culverts and Related Products

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DEPARTMENT OF JUSTICE  
OTTAWA

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DECATALOGUED

EDMOND CLOUTIER, C.M.G., O.A., D.S.P.  
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY  
OTTAWA, 1957



RESTRICTIVE TRADE PRACTICES COMMISSION

R E P O R T

CONCERNING THE MANUFACTURE, DISTRIBUTION AND SALE  
OF METAL CULVERTS AND RELATED PRODUCTS

130810

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COMBINES INVESTIGATION ACT

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Ottawa  
1957



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RESTRICTIVE TRADE PRACTICES COMMISSION

C. Rhodes Smith, Q.C., M.A., LL.B., B.C.L.  
Chairman

A. S. Whiteley, B.A., M.A.  
Member



RESTRICTIVE TRADE PRACTICES COMMISSION

OTTAWA

July 24, 1957.

Honourable E. Davie Fulton, P.C., Q.C., M.P.,  
Minister of Justice,  
Ottawa.

Sir:

I have the honour to submit to you herewith the report of the Restrictive Trade Practices Commission dealing with the manufacture, distribution and sale of metal culverts and related products.

The matter was brought before the Commission by the submission of a statement of the evidence obtained in an inquiry by the Director of Investigation and Research under the Combines Investigation Act and has been dealt with in accordance with the provisions of Sections 18 and 19 of the Act.

Evidence and argument in regard to the Statement of Evidence were heard by the Commission at Toronto between October 22, 1956 and October 29, 1956. In these proceedings Mr. F. N. MacLeod appeared for the Director of Investigation and Research and Messrs. F. D. Turville, Q.C., E. V. McKague, Q.C., C. H. A. Amrstrong, Q.C., C. V. McArthur, Q.C., P. B. C. Pepper, R. J. Zimmerman, G. R. Hunter, J. W. Brooke and J. R. Anderson appeared on behalf of the parties mentioned in the Statement of Evidence.

Yours faithfully,

(Sgd.) C. R. Smith

C. Rhodes Smith  
Chairman



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## CHAPTER I

### INTRODUCTION

#### 1. Reference to the Commission

This inquiry was brought before the Restrictive Trade Practices Commission by the Director of Investigation and Research under the Combines Investigation Act, pursuant to section 18 of the Combines Investigation Act, R.S.C. 1952, Chapter 314, the terms of which are as follows:

- "18. (1) At any stage of an inquiry,
- (a) the Director may, if he is of the opinion that the evidence obtained discloses a situation contrary to section 32 or 34 of this Act, or section 411 or 412 of the Criminal Code, and
  - (b) the Director shall, if so required by the Minister, prepare a statement of the evidence obtained in the inquiry which shall be submitted to the Commission and to each person against whom an allegation is made therein.
- (2) Upon receipt of the statement referred to in subsection (1), the Commission shall fix a place, time and date at which argument in support of such statement may be submitted by or on behalf of the Director, and at which such persons against whom an allegation has been made in such statement shall be allowed full opportunity to be heard in person or by counsel.
- (3) The Commission shall, in accordance with this Act, consider the statement submitted by the Director under subsection (1) together with such further or other evidence or material as the Commission considers advisable.
- (4) No report shall be made by the Commission under section 19 or 22 against any person unless such person has been allowed full opportunity to be heard as provided in subsection (2)."

The Director of Investigation and Research under the Combines Investigation Act submitted to the Restrictive Trade Practices Commission a Statement of Evidence, dated the 20th day of June, 1956, containing the following allegations:

"210. The evidence in this inquiry indicates that:

- (1) Informal arrangements relating to the pricing of their products existed among some or all Canadian manufacturers of metal culverts prior to 1925 but the details of these arrangements cannot now be determined.
- (2) In 1925 an association of Canadian manufacturers of metal culverts was formed under the name of the Metal Culvert Council.
- (3) The Council operated in two sections, an Eastern Section with headquarters in Toronto and a Western Section with headquarters in Winnipeg.
- (4) As far as can be determined, all Canadian manufacturers of metal culverts except E. S. Hubbell and Sons Limited were members of the Council until 1948.
- (5) Early in 1948 Maritime Steel [ Maritime Steel and Foundries Limited ] withdrew from the Council and has apparently conducted its affairs independently subsequent to that date.
- (6) At the beginning of 1948 Pedlar [ The Pedlar People Limited ] also withdrew from the Council but the Company continued to coordinate its policies relating to the sale of metal culverts with those of the members of the Council.
- (7) In 1948 Robertson-Irwin [ Robertson-Irwin Limited ] started to manufacture metal culverts and arranged to become a member of the Council at the beginning of 1949.
- (8) In 1952 the Secretary of the Eastern Section of the Council, S. J. Frame, retired. The formal organization in Eastern Canada was then disbanded. However, the former members and a representative of Pedlar have continued to meet informally and the function of distributing pricing material, which had been formerly handled by the Eastern Secretary, has been carried on by Armco [ Armco Drainage & Metal Products of Canada, Ltd. ]

(9) After the Eastern Section of the Council was disbanded certain changes were made in the organization of the Western Section but, subject only to these changes in form, the Western Section has continued to function as before.

(10) Certain companies, viz: Pounder [T. J. Pounder & Company Ltd.], Rosco (Man.) [Rosco Metal Products (Man.) Limited], Rosco (Sask.) [Rosco Metal Products (Sask.) Limited], Rosco (Alberta) [Rosco Metal Products (Alberta) Limited], and Rosco (B.C.) [Rosco Metal Products (B.C.) Ltd.], although not members of the Council, have in fact, operated as Council members because of their relationship with Rosco Metal & Roofing Products Ltd., which is a member. Latterly, Pounder has severed its relationship with Rosco but it continues to coordinate its policy with that of the members of the Western Section of the Metal Culvert Council.

(11) In the period during which the Council has functioned, meetings and discussions among members have resulted in agreements and arrangements on prices and terms and conditions of sale of metal culverts and related products. Detailed prices and instructions, reflecting such agreements and arrangements, have been prepared by the respective Secretaries and distributed to members and others. Since 1952, in Eastern Canada, Armco has performed certain of the functions of the former Secretary.

(12) The discussions at formal and informal meetings have been supplemented by informal discussions, letters and telephone conversations among and between various members and former members of the Council. All appeared to feel free to consult each other about every aspect of the pricing of metal culverts, to enter into particular agreements or arrangements supplementary to the overall scheme, and to check up on each other and demand explanations if it appeared that the agreements or arrangements were not being observed.

(13) In the result, identical prices and terms and conditions of sale, as agreed and arranged in advance among the manufacturers of metal culverts and related products, have prevailed without any significant exception throughout Canada for many years.

211. The arrangements which have been described in this Statement have operated against the public interest principally because they have substantially eliminated competition on a price basis among the manufacturers. Prices and all matters affecting laid down cost to the consumer have been determined by agreement. The public has thus been deprived of the advantages which would flow from a number of alternative suppliers genuinely competing with each other. While a number of suppliers did exist, no real alternatives were available to the consumer because each supplier offered the same pre-determined prices and terms and conditions of sale. Competition was largely reduced to mere salesmanship.

Besides the general tendency of such arrangements to lead to increased prices, there is evidence that prices of particular products were enhanced by direct agreement. One instance is the price of pipe arch which was kept high at the insistence [sic] of firms who had to manufacture it by high cost methods rather than by the simpler and cheaper method available to Armco. Another instance is the price of coated pipe. Such pipe is manufactured from either plain, galvanized or asbestos-bonded steel. The latter is more expensive. For some years, by agreement, one price was set for coated pipe, regardless of the steel used, and the evidence indicates that the price was based on the cost of the more expensive asbestos-bonded steel.

Numerous instances of agreements and arrangements relating to particular inquiries by prospective purchasers or to situations in particular areas have been noted in the Statement and illustrate a further aspect of detriment to the public.

212. It is my allegation that, at the time this inquiry commenced, the following were parties to arrangements which fixed and enhanced prices and otherwise prevented and lessened competition in the manufacture, distribution and sale of metal culverts and related products in Canada, to an extent and in a manner against the interest of and to the detriment of the public:

Armco Drainage & Metal Products of Canada Ltd.  
Canada Culvert Co. Limited  
F. C. M. Forster (doing business under the firm name  
and style of Corrugated Pipe Company)  
The Pedlar People Limited  
T. J. Pounder & Company Ltd.  
Richardson Road Machinery Company Limited  
Robertson-Irwin Limited

Rosco Metal & Roofing Products Ltd.

Rosco Metal Products (Man.) Limited

Rosco Metal Products (Sask.) Limited

Rosco Metal Products (Alberta) Ltd.

Rosco Metal Products (B.C.) Ltd.

Westeel Products Limited

Thomas Sill, of the firm of Sill, Patrick and Company,  
Winnipeg, Manitoba, Secretary of the group formerly  
known as the Western Section, Metal Culvert Council,  
and now sometimes referred to as Western  
Representatives, Metal Culverts."

Subsequently, at the request of the Commission, the Director submitted a "Supplement to the Statement of Evidence" dated the 18th day of July, 1956. This supplement expanded the summary of certain aspects of the evidence as contained in the original Statement of Evidence.

## 2. Parties Mentioned in the Statement of Evidence

The following brief descriptions of the corporations and firm against whom allegations were made as set out in section 1, are based on those contained in the Statement of Evidence, together with certain information in the supplement to the Statement of Evidence:

Armco Drainage & Metal Products of Canada, Ltd. (in this report generally referred to as "Armco"), 41 George Street, Guelph, Ontario. This company was formerly Canada Ingot Iron Company Limited and since 1931 has been a wholly-owned subsidiary of Armco Steel Corporation, Middletown, Ohio, U.S.A. (which company was formerly the American Rolling Mill Company). Armco is and has been for a number of years the largest manufacturer in Canada of metal culverts and related products. It manufactures these products at the following points, in addition to Guelph, Ontario: Winnipeg, Manitoba; Regina, Saskatchewan; Edmonton, Alberta; Vancouver, British Columbia; Charny, P.Q. (formerly Lennoxville, P.Q.); Bishop's Falls, Newfoundland (since 1955 only).

Canada Culvert Co., Limited (in this report generally referred to as "Canada Culvert"), P.O. Box 1058, London, Ontario. This company was formed on June 8, 1950 to succeed Canada Culvert Company Limited whose charter was surrendered. The latter company had operated in London from at least the 1930's. Canada Culvert is controlled by Shaw-Dupont Limited, a holding company, which also controls the Rosco group of companies listed below. Canada Culvert

manufactures metal culverts at London, Ontario

Corrugated Pipe Company (in this report generally referred to as "Corrugated Pipe"), 182 Perth Street, Stratford, Ontario. This is an unincorporated firm of which F. C. M. Forster has been sole proprietor since July, 1946. Prior to that date the business, carried on under the same name, was owned and operated by S. R. McConkey. Corrugated Pipe has only the one manufacturing plant at Stratford, Ontario.

The Pedlar People Limited (in this report generally referred to as "Pedlar"), Simcoe Street South, Oshawa, Ontario. This firm was founded in 1861 and has been carried on under the present name since 1911. Pedlar manufactures metal culverts at Oshawa, Ontario; Winnipeg, Manitoba and Vancouver, British Columbia.

T. J. Pounder & Company Ltd. (in this report generally referred to as "Pounder"), 1474 Wall Street, Winnipeg, Manitoba. This company was formed in 1948. Prior to 1953 it was associated with Rosco Metal & Roofing Products Ltd. in the operation of Rosco Culverts (Manitoba) Limited, which latter company was incorporated in December, 1950. Pounder co-ordinated its manufacturing and selling activities with those of Rosco Culverts (Manitoba) Limited. The association was terminated in 1953 and Pounder now operates independently. Pounder has only the one manufacturing plant for culverts, that at Winnipeg, Manitoba.

Richardson Road Machinery Company Limited (in this report generally referred to as "Richardson"), Avenue I and 22nd Street, Saskatoon, Saskatchewan. This company was founded about 1910 and has carried on business under the present name since about 1925. The sale and distribution of its products are handled by an unincorporated firm - Richardson Road Machinery. Richardson has only the one manufacturing plant, that at Saskatoon.

Robertson-Irwin Limited (in this report generally referred to as "Robertson-Irwin"), 411 Parkdale Avenue North, Hamilton, Ontario. This company was formerly Thomas Irwin & Son Limited. The present name was adopted in 1948. Since 1945 it has been a subsidiary of H. H. Robertson Company Limited which is a holding company and which also controls Robertsteel (Canada) Limited. H. H. Robertson Company Limited is, itself, a subsidiary of H. H. Robertson Company, Pittsburgh, Pennsylvania, U.S.A. Robertson-Irwin manufactures metal culverts at Hamilton, Ontario and Edmonton, Alberta.

Rosco Metal & Roofing Products Ltd. (in this report generally referred to as "Rosco"), 840 Dupont Street, Toronto, Ontario. This company was formerly The Roofers Supply Company Limited and The Roofers Supply Co. Limited. It was originally formed in 1899 and adopted its present name in 1952. This company manufactures metal culverts at Toronto, Ontario and Montreal, P.Q.

Rosco Metal Products (Man.) Limited (in this report generally referred to as "Rosco (Man.)"), 511 Madison Street, St. James, Manitoba. The company was incorporated on December 11, 1950 under the name Rosco Culverts (Manitoba) Limited. The present name was adopted on March 2, 1954. The company is a subsidiary of Rosco. As noted above, Rosco (Man.) was formerly operated in association with Pounder. This company manufactures metal culverts at Winnipeg, Manitoba.

Rosco Metal Products (Sask.) Limited (in this report generally referred to as "Rosco (Sask.)"), 7th Avenue and Halifax Street, Regina, Saskatchewan. This company was incorporated on March 24, 1950 as Rosco Culverts Limited. The present name was adopted on July 16, 1954. This company is controlled by Rosco and W. F. Fuller Machinery Company Limited and their respective nominees. This company manufactures metal culverts at Regina, Saskatchewan.

Rosco Metal Products (Alberta) Limited (in this report generally referred to as "Rosco (Alberta)"), 620 - 9th Avenue West, Calgary, Alberta. This company was incorporated on November 30, 1951 as Rosco Culverts (Alberta) Limited and took its present name on March 26, 1954. The company is controlled by Rosco and Ferguson Supply Alberta Ltd. and their respective nominees. This company manufactures metal culverts at Calgary, Alberta.

Rosco Metal Products (B.C.) Ltd. (in this report generally referred to as "Rosco (B.C.)"), 8750 Ash Street, Vancouver, British Columbia. This company was incorporated on March 2, 1953 and is controlled by Rosco. It manufactures metal culverts at Vancouver, B.C.

Westeel Products Limited (in this report generally referred to as "Westeel"), head office - Winnipeg, Manitoba; executive offices - Toronto, Ontario. This company was first formed about 1904 and has since gone through several reorganizations. The name was changed to its present name on September 1, 1945. Two of its more important subsidiaries, which have now been amalgamated with the parent company, were The Metallic

Roofing Co. of Canada, Ltd., Toronto and Geo. W. Reed & Co. Ltd., Montreal. Westeel manufactures metal culverts at Toronto, Ontario; St. Boniface, Manitoba; Regina and Saskatoon, Saskatchewan; Calgary and Edmonton, Alberta and Vancouver, British Columbia.

In addition to the foregoing corporations and firm, there are only two other manufacturers in Canada producing metal culverts in any substantial way. These are the following:

E. S. Hubbell & Sons, Ltd., Thamesville, Ontario. This is a small, long-established firm which has manufactured culverts on a small scale since 1934 except during the wartime period - 1939-1945. It manufactures culverts only at Thamesville, and sells them only in the district around Thamesville.

Maritime Steel and Foundries Limited (in this report generally referred to as "Maritime Steel"), New Glasgow, Nova Scotia. This firm is a successor of J. W. Cumming Manufacturing Company Limited which was reorganized in 1939 first as Maritime Steel Products Limited and then under the present name. Maritime Steel manufactures metal culverts at New Glasgow, Nova Scotia and at Charlottetown, Prince Edward Island, the latter operation being strictly controlled from New Glasgow.

### 3. Hearings and Witnesses

During the early stages of the inquiry the Director visited the office premises of all the culvert manufacturers mentioned in section 2 of this chapter, with the exception of E. S. Hubbell & Sons, Ltd., and obtained from them documents which he deemed relevant to the inquiry. These documents were all marked with three code letters to indicate the particular premises on which they were found and each sheet of every document was marked with a separate serial number, by which it may be distinguished from all the other documents. The serial numbers of all documents cited in this report are given when reference is made to them. The Director also asked for and obtained returns of information by way of answers to questionnaires which he sent to Thomas Sill and to all Canadian manufacturers of culverts except E. S. Hubbell & Sons, Ltd. With the consent of all the manufacturers the Director was also afforded access to returns of information previously made by them to the Dominion Bureau of Statistics. In addition, a number of witnesses were examined orally and certain documentary evidence was adduced at hearings before the Chairman of the Commission, held in London, Ontario, on December 8th and 9th, 1955; in Winnipeg, Manitoba, on January 16th to 19th, both inclusive, 1956; and at Saskatoon, Saskatchewan, on January 23rd, 1956, and at hearings held before Mr. Guy Roberge, a member

of this Commission, in Toronto, Ontario, from December 12th to 16th, both inclusive, 1955.

The following were the witnesses examined at the hearings held in December, 1955 and January, 1956:

F. C. M. Forster	Proprietor, Corrugated Pipe Company (unincorporated)
C. H. Gagan	Vice-President and General Manager, Canada Culvert Company Limited
J. T. Kellington	Sales Manager in charge of culverts and road building materials, The Pedlar People Limited
E. L. Campbell	General Manager, Armco Drainage & Metal Products of Canada, Ltd.
D. A. Jones	Vice-President and General Manager, Robertson-Irwin Limited
D. H. Haverson	Line Sales Manager, Robertson-Irwin Limited
M. A. Buell	General Sales Manager, Rosco Metal & Roofing Products Ltd.
Eric F. Mellish	Sales Manager for most of Ontario for Westeel Products Limited
C. W. Sunderland	Manager for Ontario, east of the Lakehead for Westeel Products Limited
Thomas Sill	Chartered Accountant, of Sill, Patrick and Company, Secretary of the Western Section of the Metal Culvert Council, or Western Representatives of Metal Culverts
E. R. Howes	Branch Manager for Manitoba, Armco Drainage & Metal Products of Canada, Ltd.

J. K. Brown	Sales Manager, Western Division, Westeel Products Limited
J. E. McAuley	Manager for Promotion and Sales, of the Culvert Department, Westeel Products Limited, west of the Great Lakes.
V. N. Bayley	Manitoba and Saskatchewan Manager, The Pedlar People Limited
F. S. Bolton	Manager, Rosco Metal Products (Man.) Limited
F. C. Dempsey	Vice-President, T. J. Pounder & Company Ltd.
P. C. R. Banting	General Manager, Richardson Road Machinery Company Limited and Richardson Road Machinery
C. H. Richardson	President and Chairman of the Board, Richardson Road Machinery Company Limited

Pursuant to Section 18(1) of the Combines Investigation Act, the Director submitted the Statement of Evidence to the Restrictive Trade Practices Commission and each of the persons against whom an allegation was made therein. Following receipt of representations from several of the parties concerned as to the date of hearings, the Commission, by an order dated July 12, 1956, as amended August 10, 1956 and September 10, 1956, fixed Monday, the 22nd day of October, 1956, at 10 o'clock in the forenoon in the Board Room, Second Floor, Postal Station "Q", 25 St. Clair Avenue East, Toronto, Ontario, as the date, time and place at which argument in support of the Statement of Evidence could be submitted and at which persons against whom any allegation had been made in such Statement would be allowed full opportunity to be heard in person or by counsel, this proceeding being in accordance with Section 18(2) of the Act. In giving notice thereof, the Commission further informed the parties that at such hearings they would be given an opportunity of further examining, or cross-examining, any witness who had been heard during the course of the inquiry, and would also be given an opportunity to call additional witnesses and to submit any additional documentary evidence.

The hearing commenced on the 22nd day of October, 1956 and concluded on October 29, 1956, the following appearances being registered:

F. N. MacLeod	for the Director of Investigation and Research
P. B. C. Pepper	for Armco Drainage & Metal Products of Canada, Ltd.
F. D. Turville, Q.C. R. J. Zimmerman	for The Pedlar People Limited
E. V. McKague, Q.C.	for Rosco Metal & Roofing Products Ltd., Rosco Metal Products (Man.) Limited, Rosco Metal Products (Sask.) Limited, Rosco Metal Products (Alberta) Limited, Rosco Metal Products (B.C. ) Ltd., and Canada Culvert Co., Limited
C. H. A. Armstrong, Q.C.	for Westeel Products Limited
C. V. McArthur, Q.C.	for T. J. Pounder & Company Ltd.
G. R. Hunter	for Richardson Road Machinery Company Limited and Thomas Sill
J. W. Brooke	for Robertson-Irwin Limited
J. R. Anderson	for Corrugated Pipe Company

At the hearing and before argument was heard by the Commission, the following witnesses were called on behalf of the parties and were examined by counsel. Certain exhibits were also received:

John Walter	Design Engineer for the Department of Highways, Ontario.
J. O. Martineau	Assistant Chief Engineer, Department of Roads, Province of Quebec.
G. H. Workman	Engineer, in the Engineering, Construction and Fire Prevention Divisions, Central Region, Canadian National Railways.
G. R. Marston	County Engineer for the County of Norfolk, Ontario.

G. W. Miller	Engineer of Maintenance of Right-of-Way for the Eastern Region of the Canadian Pacific Railway.
James Carnwath	General Manager of Concrete Pipe Limited, Toronto, Ontario.
M. C. Patton	Executive Vice-President, Armco Drainage and Metal Products Inc. of Middletown, Ohio, and Director and Executive Vice-President of Armco Drainage & Metal Products of Canada, Ltd.
C. G. Green	Employed by Statistical Reporting and Tabulating Limited, Toronto.
George F. Bain	Economist and President of Canadian Economic Research Associates, Toronto.
James N. Wolfe	Lecturer, Department of Political Economy, University of Toronto.

For purposes of clarity, reference in this report to evidence given at the earlier hearings for the taking of evidence will be made as follows: "Evidence, p. . . .". Reference to evidence given at the hearing before the Commission will be made as follows: "Hearing, p. . . .".

#### 4. Position Taken by the Parties with Respect to the Statement of Evidence

In accordance with the established practice, and at the request of the Commission, counsel for all the parties against whom allegations were made in the Statement of Evidence, submitted to the Commission either before or at the opening of the hearing, written briefs or oral statements setting out very clearly the position taken by their respective clients and the points upon which they took issue with the Director. The brief presented by counsel for Armco was much the most comprehensive and the points advanced therein were adopted by counsel for all the other parties. The other briefs and statements laid emphasis on particular points at issue and raised additional issues which were stated to affect the position of individual parties as distinguished from the others.

The main issues raised by the various briefs in reply to the Statement of Evidence may be summarized as follows:

- (1) It was submitted that the Statement of Evidence was not an impartial document setting out all the facts favourable as well as unfavourable to the parties, that in preparing it, the Director had selected only material which placed the metal culvert manufacturers in a bad light and had largely ignored the sworn evidence of the witnesses examined at London, Toronto, Winnipeg and Saskatoon. Only sixteen extracts from almost eleven hundred pages of sworn testimony were referred to in the Statement. It was, therefore, unfair and misleading and many of its assumptions, inferences and conclusions were contrary to or unsupported by the evidence as a whole.
- (2) Issue was taken with all the allegations contained in paragraphs 210, 211 and 212 of the Statement of Evidence, and particularly with the allegation in paragraph 212. These paragraphs are quoted in section 1 of this chapter.
- (3) In reply to the allegations of the Director three main submissions were made:
  - (a) The evidence viewed as a whole discloses a case of price leadership, not one of price agreement. Throughout the period under review in this inquiry Armco has occupied the position of leader - leader in promoting the use of metal culverts, leader in volume of production and sales, leader in research facilities and resources, leader in engineering, leader in low-cost production and consequently, leader in price. The dominant position of Armco has also been assisted by the fact that it is the Canadian outlet for the American mill of its controlling American company. Further, its major business is culverts, while for most of the other manufacturers the culvert portion of their business is auxiliary to a variety of other metal products. The other manufacturers of necessity have had to follow Armco's prices in order to stay in business. In respect of prices the Metal Culvert Council and the meetings of manufacturers have merely provided a clearing house for Armco's prices. There have been no sanctions to enforce compliance with those prices.
  - (b) Competition from manufacturers of culverts made from other materials than metal, and particularly from manufacturers of concrete pipe and concrete box culverts, prevents the metal culvert manufacturers

from having a virtual monopoly of the culvert market and exercises a free enterprise restraint on metal culvert prices.

- (c) Even if it is held that the evidence discloses a case of price agreement, then that agreement has not operated to the detriment or against the interest of the public, but has in fact operated to the public benefit. By reason of competition from concrete culverts it always would have been and still would be impossible for the manufacturers to agree, or to arrange to prevent or lessen competition to the detriment or against the interest of the public.

In addition to the foregoing main issues, the following points were raised on behalf of all the parties:

- (d) For the pre World War II period the main evidence relied on by the Director is one Exhibit, T-2, which is dated on its face in 1930, and is evidently a compilation brought up to that date from the 1920's. It was not found on the premises of any culvert manufacturer. There is no evidence as to what part it played in the industry in the 1920's and little evidence that it was in force after 1930.
- (e) During the wartime period, and until price controls were lifted on April 1, 1946, the metal culvert industry was rigidly controlled in all its aspects and no allegation of misconduct, contrary to the Combines Act, should be levelled against it during this period.
- (f) For the post-war period, one of great industrial expansion, four points were raised:
  - (i) For many years the largest culvert customers, viz., provincial governments, railways and municipal bodies, have asked each metal culvert manufacturer for a price list at the beginning of the year and have placed individual orders during the year against that list. The evidence indicates that as a matter of policy these customers shared their business for metal culverts among the manufacturers.
  - (ii) Tendering for culvert contracts was practically unknown prior to 1954.

- (iii) The office of the Secretary of the Metal Culvert Council was closed in 1952.
- (iv) No objection can be taken to the operation of the industry during the last few years, with the sole exception that identical tenders were received by one or two customers on large jobs.
- (g) While the published prices of the other manufacturers were the same as Armco's there is little evidence that they maintained those prices and a respectable body of evidence to the contrary.
- (h) There is no evidence of detriment to the public by reason of:
  - (i) Customers paying a higher price for metal culverts than would otherwise be the case.
  - (ii) Customers being restricted in sources of supply of metal or alternative types of culverts.
  - (iii) The standard of quality of metal culverts being kept low by perpetuation of out-of-date types thereof or methods of manufacture.
  - (iv) Any restriction on manufacturers which limited their entry into or continuance in the metal culvert business.
- (4) On behalf of Pounder the following additional points were submitted:
  - (a) The company did not commence to manufacture culverts or related products for sale until February or March, 1954.
  - (b) Prior to December 15, 1954 it had acted as a distributor and sales representative for Rosco Culverts (Man.) Limited and had also been a shareholder in that company, but had been associated with it in no other way.
  - (c) Pounder was not at any time a member of the Metal Culvert Council or any branch of it.
  - (d) Pounder denied that it maintained identical prices or terms corresponding to those of other manufacturers as alleged in the Statement of Evidence, or

that it co-ordinated its policy with members of the Western Section of the Metal Culvert Council.

- (e) Between February 15, 1954 and June 17, 1955 Pounder's representative attended two meetings of local manufacturers of culverts or related products, the sole purpose of such attendance being to assist it in the course of its business. During the same period, as a young and inexperienced organization, Pounder found it useful to obtain the price lists of Armco as a guide in pricing metal culverts and related products, but was never committed by any agreement or arrangement to follow those price lists.
  - (f) The public has not been deprived through any action or policy on the part of Pounder of any benefits which would flow from a number of alternative suppliers. At all times the company has competed in a genuine way with all other metal culvert manufacturers who supply metal culverts and related products to the marketing area occupied by it.
- (5) Additional points submitted by counsel for Pedlar were:
- (a) Pedlar's accurate cost accounting system shows that its suggested selling prices for culverts, based on manufacturing costs, 25 per cent allowance for office overhead and selling expense, and 10 per cent for profit, have been comparable throughout the years with the prices established by Armco, except for pipe arch culverts. With respect to pipe arch, for which its method of manufacture is more costly than Armco's, Pedlar has sustained a loss on most of its sales and in only a few cases has it been able to make a profit. However, in order to meet competition it is necessary to offer customers a full line of culverts, including unprofitable lines.
  - (b) The meetings of the Metal Culvert Council, both East and West, so long as Pedlar was a member, were not for the purpose of agreeing on price.
  - (c) Both before and after Pedlar's resignation from the Metal Culvert Council in 1948, Pedlar personnel attended meetings of the Council to obtain information respecting the prices Armco intended to introduce in order to enable Pedlar to adjust its prices so as to remain competitive with Armco.

- (d) Pedlar's cost figures show that there has been no detriment to the public.
- (6) On behalf of Corrugated Pipe (F. C. M. Forster) it was submitted that even if it is found that there was an agreement or an arrangement between metal culvert manufacturers which fixed or enhanced prices or otherwise prevented or lessened competition in the manufacture, distribution and sale of metal culverts and related products in Canada, it has not been proven that Forster was a party to it.
- (7) On behalf of Thomas Sill it was submitted:
  - (a) During the period when Mr. Sill acted as Secretary of the Western Culvert representatives, he was, and still is, a chartered accountant and a partner in a firm of chartered accountants having their place of business in Winnipeg, Manitoba.
  - (b) At no time has he ever been engaged, directly or indirectly, in the manufacture, distribution or sale of culverts and related products. Under these circumstances it has not been, and is not, possible for him to be a party to the arrangements alleged in the Statement of Evidence.
  - (c) There is nothing in the evidence of Mr. Sill, or of any other witness, which supports the allegation that Mr. Sill was a party to the alleged combine.
  - (d) There is nothing in the documents referred to in the Statement of Evidence which in any way supports the allegation that Mr. Sill was a party to the alleged combine or which in any way varies or rebuts the explanation of the scope of his functions and duties as given by him in his sworn testimony.



## CHAPTER II

### THE METAL CULVERT INDUSTRY

#### 1. The Nature and Purpose of the Product

A culvert may be described generally as a transverse drain or waterway under a railway, road or canal. The term is also applied to sewer and airport drains.

Culverts may be made of various materials, examples being reinforced concrete, creosoted wood, vitrified tile and corrugated copper bearing steel.

This inquiry is concerned primarily with the manufacture, distribution and sale of metal culverts, which for all practical purposes means culverts made of copper bearing steel. The use of other metals such as cast iron seems to have practically come to an end. It is necessary to point out, however, that culverts made of creosoted wood and more especially of concrete, whether prefabricated concrete pipe or concrete poured in a culvert mould on the site, constitute a large part of the total culvert field. More will be said about concrete culverts later in this report, particularly in appraising the effects of arrangements and practices among metal culvert manufacturers that will appear from the evidence.

Corrugated metal as the basic material for the manufacture of culverts only came into use in modern times, as appears from Exhibit W-1, an Armco manual entitled "Handbook of Drainage and Construction Products", in which we find the following at page 69:

"Corrugated metal pipe was first developed and used as culverts in 1896. As confidence was gained in the use of this light-weight, thin-walled pipe, the diameters were increased to 72 and 84 in. Fill heights were increased to 100 ft or more. Users include highway departments, railroads, sewer departments, levee engineers and many others."

The Statement of Evidence quotes a Pedlar pamphlet "A Saga of Achievement", which was published about 1953 and which refers to the origin of corrugated metal culverts:

"Then came a new type of culvert that seemed to offer new possibilities and advantages. The idea was born in a small Indiana town when the town engineer was idly watching the druggist unwrap corrugated cardboard containers from around his bottles. In 1896, the corrugated metal culvert was patented.

During the first few years, they were made of black iron with a steel filling in the centre of the sheet. Then steel was used throughout, which not only provided a better culvert but reduced the cost considerably. Firms were licensed to make the new corrugated pipe and construction began in earnest.'

(Page 41)''

Corrugated metal culverts are made in various sizes, the gauge or thickness of the metal increasing as the size of the culvert increases. They also have several shapes described in the Statement of Evidence as follows:

"12. Corrugated metal culverts are made in three basic shapes: round, pipe arch and arch. Round metal culverts are simply round pipe of corrugated metal. Pipe arch is shaped like a round pipe which has been flattened somewhat (one method of manufacture is to deform round pipe into this shape), the upper portion is shaped to form a broad arch while the bottom is almost but not quite flat. Pipe arch is flatter and wider than ordinary round pipe of equal periphery and is particularly suitable where headroom is limited. Arch or part circle culverts are, as the name implies, in the shape of an arch. This type of culvert is also suitable where headroom is limited. Both pipe arch and arch culverts have certain advantages over round pipe where fast, unrestricted run off is desired."

It should be added that arch culverts have no metal bottom.

The manufacturing process for ordinary round corrugated pipe is quite simple. Flat sheets of culvert steel of the proper gauge are corrugated. The sheets are then passed through forming rolls, set to produce the curvature required for a culvert of the intended diameter. Then holes are punched and the sheets are rivetted together to form a pipe or hollow cylinder. The corrugations are made parallel to the length of the sheet, but in the completed culvert are at right angles to the axis of the pipe.

Pipe arch culverts may be made in the same manner, the sheets being formed into the special shapes required to produce, when rivitted together, this flattened type of culvert. Evidence in the inquiry indicates that this process is more expensive than one patented by Armco, which is to make an ordinary round pipe and then press it into the desired shape.

For arch or part circle culvert the process is the same as for round culverts, except that the sheets are not curved so as to make a complete pipe but only part of the circumference of the pipe.

For large culverts another process was developed, described in the Statement of Evidence as follows:

" . . . About 1931 Armco patented a method of manufacturing the larger sizes of pipe, pipe arch and arch by preparing suitably curved sheets so that they could be bolted together on the site. This method makes the manufacture and transportation of very large metal culverts practical. Instead of having to handle a culvert of unwieldy proportions it is only necessary to handle curved steel plates. In Armco's Handbook it is stated that the introduction of sectional plate culverts (as this type is called) has extended the range of sizes of pipe to those of 15 feet in diameter and larger and of arches to those of 30 feet (p.69). Another advantage of sectional plate culvert is that heavier steel can be used in the bottom sections of pipe or pipe arch. Armco's sectional plate is sold under the trade mark Multi-Plate and Rosco's under the trade mark K-D Plate. Pedlar imports and sells sectional plate culverts manufactured by The Republic Steel Corporation of Cleveland, Ohio."

Another type of culvert pipe is called "nestable", described in the Statement of Evidence as follows:

"Another type of culvert is known as 'nestable'. This is standard rivetted pipe manufactured in two halves which can be stacked or nested for shipping. The two halves are then bolted together on the site. This type is normally only manufactured when it has to be shipped long distances. For example, some of the nestable pipe which came into Canada after the last war was war surplus stock which had originally been manufactured in the U.S.A. for shipment to Europe."

Still another type of corrugated metal pipe is known as "Hel-Cor", the name being a registered trade mark of Armco Steel Corporation.

While most of the Canadian culvert manufacturers distribute Hel-Cor, it is produced by Armco only. Armco's Handbook, previously referred to, compares the corrugations in this pipe with those in ordinary pipe (p. 37).

"Most corrugations are parallel to the length of a sheet and usually circumferential or at right angles to the axis of a pipe or cylinder. One exception is in Armco Hel-Cor Pipe where the continuous lock seam and corrugations run helically (or spirally) round the pipe."

Mr. E. L. Campbell of Armco said of Hel-Cor:

"Let me say that we consider, not under the term of culvert but as a drainage product, our Hel-Cor sub-drainage pipe, which is a small sized pipe. . . ."

(Evidence, pp. 258-9)

"A. It is a small diameter pipe. It derives its name from the fact that it is made from long rolls of galvanized strip which are fitted into a machine and formed into a pipe with helical corrugations. That is used primarily for sub-drainage of highways, railroads and airports. . . .

Q. It is normally made in small sizes, is that correct?

A. We produce it only in 6 and 8 inch."

(Evidence, p. 262)

The principal materials, finish and treatment found in the various types of metal culverts are described succinctly in the Statement of Evidence:

"14. Corrugated metal culverts are manufactured from two types of steel. The first is a copper bearing steel which has been galvanized. The effect of galvanizing is commented on in Armco's Handbook at page 173:

'Corrosion of metal is a surface reaction. Protecting or treating that surface is a logical method of combatting such reaction and thereby giving longer life. Common practice for many years on underground and aboveground structures has been to use a zinc coating (galvanizing) on ferrous base metals, both because of its effectiveness and low cost. The galvanizing not only directly protects the underlying iron or steel, but by virtue of its electro-chemical nature, it sacrifices itself and protects the base metal at scratches in the coating. This behavior is unlike that of nickel, chromium, tin, copper or lead coatings on steel or iron. These metals, being lower in the electro-chemical series, tend to accelerate the corrosion of exposed areas of iron or steel where exposed. The sacrificial effect of galvanizing is illustrated by the fact that where sheets are sheared or punched after galvanizing, the raw edges have no influence on the service life of the structure.

The life of a galvanized coating (2 oz per sq ft total on both sides of sheet) in normal intermittent culvert flow conditions may be a decade or more. Where not subject to erosion and flow, it may last indefinitely.

Many plain galvanized corrugated metal pipe culverts and sewers have under normal conditions given up to forty-five years of satisfactory service.'

The second type of steel is known as 'Asbestos-Bonded' which is a registered trademark of Armco Steel Corporation, Middletown, Ohio. Full details are given in various Armco publications which are in evidence, including the Handbook (see at page 175). Briefly, asbestos fibres are embedded in the galvanized coating and these fibres provide a permanent bond for bituminous coating or pavement. Asbestos-Bonded steel is manufactured exclusively by Armco Steel Corporation but it has been sold by that company to culvert manufacturers other than its associated companies. In Canada, Pedlar obtained a limited supply of this steel for some years from Armco.

15. Metal culverts are sometimes coated to give additional protection to all or part of the metal and from this aspect may be classified as plain, coated, paved or paved and coated.

Plain or uncoated culverts are those of galvanized steel without any further protective coating. Asbestos-Bonded steel is not used for this type of culvert or, to put it another way, culverts of Asbestos-Bonded steel are always coated.

Coated culverts are those (of galvanized or Asbestos-Bonded steel) which have been covered with a protective bituminous coating. Armco has developed a special asphalt which it licenses other manufacturers to use. This asphalt is not produced by Armco but by asphalt producing firms (such as Imperial Oil Limited) and sold directly by such firms to the other manufacturers who use it. The usual method of coating is to heat the asphalt and dip the culvert in it. The evidence indicates that other methods of applying a coating and other types of bitumens have been, and in some cases still are, used by some manufacturers.

Paved culverts have a pad or pavement in the bottom on the inside (which is, of course, the point of greatest wear). The pad or pavement is usually of bituminous material but Westeel uses one of metal. After the pad is in place the pipe is dipped in asphalt so that both pad and pipe (or pipe arch) are coated. This coating may cover the pad and lower part of the pipe only or it may cover the pad and the whole pipe. In the former case

the culvert is said to be paved and in the latter case paved and fully coated. There are minor differences in terminology among the manufacturers but the terms used are usually self-explanatory. The important point to note is that a paved culvert is always partially coated and may be completely coated. E. L. Campbell of Armco indicated that paved pipe was now always completely coated since for all practical purposes the cost was the same whether the pipe was wholly or partially coated and there was not [ sic ] point in manufacturing the partially coated pipe. . . .

Paved-Invert is Armco's registered trade mark for its paved culverts. The term has on occasion been loosely used in the industry to refer to paved culverts generally."

The foregoing description of the various types of metal culverts makes it clear that culverts may be classified in several ways. The Statement of Evidence contains the following table of classifications, which is a useful aid to a clear understanding of the terms used throughout the evidence and in this report:

"Basic materials:

- (1) Galvanized copper bearing steel
- (2) Asbestos-Bonded steel

Type of corrugation:

- (1) Parallel to the length of the sheet and at right angles to the pipe or cylinder
- (2) Helical

Shape of culvert:

- (1) Round
- (2) Pipe arch
- (3) Arch

Protective coating:

- (1) Plain
- (2) Coated
- (3) Paved
- (4) Paved and fully coated

Method of manufacture:

- (1) Completely fabricated in factory
- (2) Fabricated in sectional plates to be assembled on the site.
- (3) Fabricated as nestable pipe"

## 2. Production and Imports

### (a) Production

The value of the total production in Canada of metal culverts can be found with reasonable accuracy in statistics published by the Dominion Bureau of Statistics. The figures given are for sheet metal culvert pipe, which for this purpose includes arch and pipe arch. Some of the pipe shown in these figures may have been used for other purposes than culverts, e.g., sewers and sub-drainage. However, it would appear that pipe used for these purposes forms a very small percentage of the total produced in Canada and that the D.B.S. figures give a reasonably accurate picture of the production of metal pipe used for culvert purposes.

The D.B.S. also publishes statistics giving the value of the production in Canada of concrete and vitrified clay (or tile) pipe. The Commission does not consider that these figures afford a reliable statement of the extent to which concrete and tile are used for culvert purposes. Both concrete and tile pipe are used quite extensively in sewers and for sub-drainage work as well as for culverts. Again, culverts are frequently made by pouring concrete into box moulds on the site, while the D.B.S. figures include only concrete pipe manufactured as such. In addition, evidence was given at the hearing before the Commission which was intended to indicate that the D.B.S. does not receive as complete returns in respect of concrete pipe as it does of metal pipe. This evidence dealt particularly with the situation in the Province of Quebec. Mr. J. O. Martineau, Assistant Chief Engineer for the Provincial Department of Roads, filed an exhibit listing some 124 concrete culvert manufacturers of the Province of Quebec (Exhibit H-2) bearing a statement that the list was revised on October 16, 1956. His evidence concerning this list was as follows:

"Q. Mr. Martineau, I now hand you a list of concrete culvert manufacturers. Have you had that checked?

A. Yes, I have had that checked and according to our information this list of concrete pipe manufacturers in the Province of Quebec contains those that we know of.

BY THE CHAIRMAN:

Q. That is complete as far as you know?

A. Yes."

(Hearing, p. 58)

Mr. Martineau further stated that over the years his department had bought concrete pipe from about 78 manufacturers.

No evidence was given at the hearing as to the number of concrete pipe manufacturers in Quebec who made returns to the D.B.S. However, the D.B.S. publication "The Concrete Products Industry" for 1953 and 1954 lists the number of operating plants manufacturing concrete products for the Province of Quebec as being 141 in 1952, 152 in 1953 and 170 in 1954. The Commission has obtained from D.B.S. the number for 1955, viz., 190. The number for 1956 is not yet available, but the steady increase during the previous four years makes it seem unlikely that it will show a substantial reduction. The D.B.S. figures may include some concrete plants which do not make culvert pipe, but they do render inconclusive the figures submitted by Mr. Martineau.

While the D.B.S. figures for concrete and tile pipe are subject to the foregoing limitations upon their use in this inquiry, they may be said to give a general indication of changes in the value of concrete and tile pipe production over the years. They are shown along with the figures for metal culvert pipe in Table 1:

Table 1

Value of Various Types of Pipe Produced in Canada, 1925-1956

Year	Sheet Metal Culvert Pipe <sup>(1)</sup>	Concrete Drain Pipe, Sewer Pipe, Water Pipe and Culvert Tile <sup>(2)</sup>	Drain Tile, Sewer Pipe and Flue Linings made from Domestic Clays <sup>(3)</sup>
	\$	\$	\$
1925	467,338	596,256	-
1926	866,512	647,798	1,876,794
1927	1,030,865	766,269	-
1928	1,443,245	1,294,076	2,379,698
1929	1,366,830*	1,546,376	2,726,203
1930	1,208,000	1,181,943	-
1931	1,484,000	1,373,136	1,837,213
1932	493,000	921,244	-
1933	297,000	1,014,443	577,287
1934	732,000	202,345	-
1935	864,000	305,203	686,895
1936	859,000	432,424	803,075
1937	1,123,167	377,806	1,089,180
1938	845,907	464,916	1,100,881
1939	1,023,073	481,095	1,167,181
1940	1,040,817	791,371	1,430,154
1941	906,688	781,661	1,755,753
1942	539,757	1,242,470	1,721,580
1943	264,329	1,283,474	1,507,223
1944	244,899	988,227	1,390,457
1945	586,362	1,354,779	1,674,016
1946	1,626,631	2,089,717	2,032,403
1947	2,669,045	2,876,618	2,730,312
1948	4,343,703	4,155,134	3,449,294
1949	5,378,000	4,658,879	3,415,278
1950	5,944,000	4,962,704	4,259,992
1951	7,176,000	8,345,402	4,426,186
1952	9,492,000	10,036,049	4,919,260
1953	10,048,000	10,070,626	5,838,362
1954	11,205,000	11,631,582	6,212,425
1955	14,526,000	18,154,300	7,107,946
1956	18,468,317**	-	-

\* Revised figure.

\*\* Preliminary.

Sources: Column (1) D.B.S. Annual Report - "The Sheet Metal Products Industry"

" (2) D.B.S. Annual Report - "The Concrete Products Industry"

(3) D.B.S. Annual Report - "The Clay and Clay Products Industry"

None of the Canadian culvert manufacturers manufacture the steel sheets which form the basic material for metal culverts. All such culvert steel is purchased, usually from Canadian suppliers. Until very recent years there was only one Canadian supplier, The Steel Co. of Canada, Limited, at Hamilton, Ontario, but during the last two or three years this type of steel sheet has also been manufactured by Dominion Foundries & Steel, Limited, also at Hamilton.

All the Canadian metal culvert manufacturers authorized the Director to obtain from the D.B.S. detailed information concerning their culvert production. From the figures thus made available the distribution of this manufacturing industry throughout Canada is clearly seen, both geographically and as between companies.

Looking at the geographic position we find that production in the Maritimes in terms of either tonnage or dollar value is quite small, being generally in the neighbourhood of 2 per cent of the Canadian total. Production in Quebec is only slightly larger, never having risen as high as 5 per cent of Canadian production in any of the five years 1950 to 1954 inclusive. Ontario has the largest production of any province, averaging about 43 per cent of Canadian production in the same years, 1950 to 1954. In Western Canada production is very substantial, particularly in Alberta. For the four Western provinces the total production during the years 1950 to 1954 has exceeded that for the rest of Canada, except in 1951 when it was about the same as that for Ontario.

Looking at the relative productive position of the companies we see that for quite a number of years Armco has been the largest producer by a considerable margin. In each of the years 1950 to 1954 the production value of its several plants has been 40 per cent or more of the total Canadian production. In those years the production of the next two largest companies taken together has been approximately equal in value of that of Armco. Production by the remaining companies has been much less, ranging from a high of 10 per cent to a low of less than 1 per cent of the Canadian total.

One of the points of this inquiry upon which all parties have been in agreement is the long-continued dominant position of Armco. In this connection it may be noted that prior to 1940 there were years in which Armco was not the largest producer of metal culverts among Canadian companies. Armco's position is most outstanding in Ontario where in recent years, almost one-half its production has been made and where, in 1954, its output was three times as great as that of the next largest producer. In the Prairie Provinces the difference is not as great and, in fact, in Saskatchewan Armco has been third in volume of production.

The production of sheet metal culverts is carried on within the Sheet Metal Products Industry and in the case of practically all manufacturers forms only a part, although in some cases a major part, of the operations carried on at each plant. For this reason statistics are not available as to employment in the production of metal culverts or as to other aspects of production, such as size of plant, etc. The evidence indicates that in the case of Armco, culverts and related products comprise about 40 per cent to 50 per cent of its operations. In the case of the other larger companies the proportions of culvert production to total output range from about 7 or 8 per cent in the case of Rosco to 15 per cent in the case of Pedlar.

(b) Imports

The evidence concerning imports of metal culverts was well summarized in the Statement of Evidence:

"23. Certain specialized types of culverts such as sectional plate culverts and accessories such as end sections are imported from the United States by the culvert manufacturers and particularly by Armco. Apart from this, importations have been negligible. Most of the witnesses called were asked about such importations and could recall only a few importations by a dealer in Ottawa (M. Zagerman & Co. Ltd.), one case connected with a sale to Toronto Township, one importation of metal pipe by a dealer in Rouleau, Saskatchewan (see Evidence of E. R. Howes at p. 826, et seq), and an instance where an American firm, Beall Pipe and Tank Corporation of Portland, Oregon, was awarded a contract in British Columbia after previous identical tenders by Canadian manufacturers had been thrown out."

On the other hand, while most of the culvert steel used in Canada is manufactured in this country, some culvert steel is imported almost entirely from the United States, by Canadian culvert manufacturers. Asbestos bonded steel for culverts has been made only by Armco Steel Corporation in the United States under exclusive licence from the patentee, H. H. Robertson Company. Evidence given before the Commission was to the effect that the basic product patents on this product expired some two years ago; that to all intents and purposes as far as corrugated pipe is concerned there are no patents now unexpired on asbestos bonded steel, and that any company can now use the asbestos bonding process without a licence (Hearing, pp. 167-8).

Since January 1, 1948, the customs duty on imports of steel culverts from any nation that is a party to the General Agreement on Tariffs and Trade has been 15 per cent. Prior to that it was 27-1/2 per cent under the Most-Favoured-Nation tariff. Both before and since 1948, the duty has been 12-1/2 per cent under the British Preferential tariff (Customs Tariff Item 397(d)).

For steel sheets coated with zinc (galvanized) prior to January 1, 1948, the Most-Favoured-Nation tariff was 20 per cent. Since that date under GATT it has been 17-1/2 per cent. Since 1932 the British Preferential tariff has been 7-1/2 per cent (Customs Tariff Item 383(c)).

For steel sheets coated with paint, tar, asphaltum or otherwise coated (this includes asbestos bonded), the Most-Favoured-Nation tariff has been 12-1/2 per cent and the British Preferential tariff 5 per cent since February, 1937 (Customs Tariff Item 383(e)).

Mr. E. L. Campbell, of Armco, stated that the laid-down cost of culvert steel was higher when imported from the United States than when obtained in Canada (Evidence p. 271). In statistical information filed with the Commission on behalf of Armco (Exhibit H-21, p. 29) the laid-down cost at Guelph of U.S. galvanized sheet is shown as 7 per cent to 26 per cent higher than the average cost of Stelco sheet in the period 1950 to 1956, with the greatest difference in the latter year.

No evidence of export trade in metal culverts or culvert steel was brought before the Commission. If any such trade exists it must be quite insignificant in extent.

### 3. The Market for Metal Culverts

The nature of the market for metal culverts is readily apparent from the purpose for which the product is used. Some culverts are sold to private corporations and individuals, but the great bulk finds its customers among public authorities responsible for drainage across roads, viz., the federal and provincial governments and the municipalities, certain boards and commissions established by public authorities, and railway companies, which have similar responsibilities with respect to their tracks. Airports, whose drainage may be said to constitute a significant though small share of the total market, are usually administered by a public or quasi-public authority.

All of the manufacturing companies sell culverts directly or through a subsidiary selling organization. In addition, several of the companies sell through jobbers or dealers at least in some territories. Sales to municipalities are more likely to be made through jobbers than are government or railway sales. A special situation exists in Alberta and Saskatchewan. For many years companies operating in those provinces have paid a commission to the Alberta Association of Municipal Districts and the Saskatchewan Association of Rural Municipalities on culvert orders from Alberta and Saskatchewan municipalities placed through their respective associations.

Many municipalities in those provinces have ordered culverts in this way. One witness said the practice had been going on for at least thirty-five years in Saskatchewan (Evidence p. 891).

Transportation costs constitute an item of considerable importance to culvert manufacturers marketwise and have undoubtedly had some influence in the establishment by several companies of branch plants or subsidiary companies in provinces other than that in which their main plant is located. The reason why transportation costs are of such importance is well set out in the following two paragraphs from the Statement of Evidence:

"24. Metal culverts are comparatively heavy and bulky in relation to their value and are awkward to ship in the sense that their bulkiness only permits a limited quantity to be loaded on a conveyance. This latter feature can be overcome to some extent when different sized pipe are shipped together because smaller ones can then be shipped inside larger ones. As has already been noted, one of the main advantages of sectional plate and nestable culverts are that these types can be stacked compactly for shipping.

Some indication of the incidence of transportation costs was given by Mr. Kellington of Pedlar in a talk prepared for delivery to that Company's salesmen. He said, in part:

' . . . You may not realize just how large a percentage of our culvert dollar is taken by freight charges. For example: In a shipment from our plant here, to Kingston, a distance of 130 miles, on a 24" diameter, 14 gauge culvert, say 50 feet long, with a value of approximately \$220.00, freight charges are about 7% of the selling value. Or let us take 50 feet of 72" diameter, 10 gauge, with a value of \$1,263.00 our freight charges amount to \$158.00 or slightly over 12%. However, that is only a part of the story. - If we are to keep our price lists simplified, (if we may use that word loosely) - it will be necessary for us to lay the same culverts down at, say, Port Arthur, Ontario, for the same per foot price as at Kingston. In this example then, we will have freight charges running up to 22% of our selling price on the 24 inch and 27% of the list selling price on the 72".'

(Serial 2186)"

In Mr. Gagan's (Canada Culvert) evidence there is the following concerning freight costs:

"Q. Do you find that freight affects your costs ?

A. Well, I would say that freight averages about, oh 8 to 10 per cent of our selling price."

(Evidence, p. 106)

Mr. Kellington of Pedlar said that in an extreme case freight might run as high as 20 per cent of selling price.

#### 4. Competing Products

Mention has already been made earlier in this chapter of culverts made from other materials than metal, e.g., creosoted wood, vitrified clay (or tile) and concrete. There are many references in the evidence, particularly in the oral evidence, to competition from these sources, special emphasis being laid upon competition from concrete pipe. It was urged upon the Commission that concrete pipe provided continuous keen competition for the metal culvert industry, rendering impossible the acquisition of monopoly power or control of the culvert market by the metal culvert manufacturers. The extent and effect of competition from other materials will be considered later in this report.

## CHAPTER III

### THE METAL CULVERT COUNCIL

#### 1. Formation

An organization of metal culvert manufacturers known as the Metal Culvert Council was established in 1925. The evidence relating to its formation is scanty, but there is one document which is quite definite as to the date. The first two paragraphs of a letter sent to Council members by S. J. Frame, who was the Secretary of the Council throughout its existence, dated January 28, 1948, read as follows:

"The funeral of Mr. S. R. McConkey, the late Chairman of the Metal Culvert Council, took place at Stratford yesterday afternoon.

Mr. McConkey was Chairman of the Metal Culvert Council from the date of its inception, February 16th, 1925, until September 24th, 1946, or over twenty-one years; Mr. McConkey, upon his retirement being succeeded, as Chairman, under date September 24th, 1946, by Colonel L. E. Jones."

(Serial 2643)

Mr. McConkey in addition to being Chairman of the Council had also been the proprietor of Corrugated Pipe.

Prior to 1925 it appears that there may have been some arrangement for the exchange of information among manufacturers, but the evidence rests chiefly on the memory of one man and is indefinite. In the oral testimony of C. H. Richardson, founder of Richardson Road Machinery Company Limited, which has been manufacturing culverts since early in 1911, we find the following:

"Q. Do you recall if the Council was in existence when you first started the business in 1910?

" A. No, it wasn't.

Q. Do you recall any circumstances about the formation of the Council?

- A. I do. When you speak about the Council there was some type of conveying information before the time of the Council. At first it wasn't a formal thing at all."

(Evidence, p. 1067)

## 2. Division into Eastern and Western Sections

The headquarters of the Council was in the office of the Secretary, S. J. Frame, in Toronto. At a date not disclosed in the evidence, but early in its history, a sub-office was set up in Winnipeg. The relationship between the Toronto and Winnipeg offices varied during the first few years after 1925, but the evidence indicates that some time prior to January 2, 1931, the organization had been settled on the basis of there being one Metal Culvert Council with two sections, viz., an Eastern Section to cover Ontario, Quebec and the Maritime Provinces, and a Western Section to cover the Prairie Provinces and British Columbia (Exhibit T-2, p. 5).

From the same page of Exhibit T-2, and from the evidence as to years subsequent to 1931, it is seen that some companies, apparently those with manufacturing plants in both parts of Canada, were members of both sections of the Council.

The office arrangement in Western Canada and later changes affecting the Council organization are described in the Statement of Evidence:

"28. A firm of chartered accountants in Winnipeg, Manitoba has acted as Western Secretary. This firm has been known successively as Hubert Reade & Co., Hubert Reade, Sill & Co., and Sill, Patrick & Co. Within the firm, Mr. Hubert Reade and, since his death, Mr. Thomas Sill, have carried out the duties of Secretary to the group. This has resulted in both Mr. Sill and the firm being referred to as the Western Secretary but, according to Mr. Sill's return of information and his oral evidence, the correct position is that the firm is the Secretary while Mr. Sill is the individual within the firm who carried out the duties involved.

29. Mr. Frame retired at the end of June, 1952 (see Serial 6152 dated July 11, 1952 which is set out below). The formal organization in Eastern Canada was then disbanded. Up until this time the situation was that Mr. Frame collected the fees for both Sections from the members and paid the fees of the Western Secretary. When Mr. Frame retired arrangements were made for the Winnipeg office to continue functioning with the manufacturers concerned bearing proportionate shares of the cost and making payment direct to Sill, Patrick & Co. No formal steps were taken to reconstitute the Western Section and

it appears to have simply carried on, the only difference being the arrangements regarding fees. There seems to be some difference of opinion as to the correct name of the group and according to Mr. Sill it is now commonly known as the 'Western Culvert Representatives'. However, in informal usage at least, the group is sometimes referred to as the Council or the Metal Culvert Council. The point does not seem to be of great practical importance because, while the name may not be clear, there is no conflict in the evidence as to the existence and method of operation of the group."

### 3. Membership

The Statement of Evidence asserts (paragraph 210, (4)) that:

"As far as can be determined, all Canadian manufacturers of metal culverts except E. S. Hubbell and Sons Limited were members of the Council until 1948."

This assertion is fully supported by the evidence of officials of the various companies, and by the returns made by the companies to the Director, but it must be noted that some companies have resigned from membership and that several new companies have entered the culvert manufacturing field since that date.

Concerning E. S. Hubbell & Sons, Ltd. the Statement of Evidence states that the company has no connection with the Council as far as can be learned. No evidence to the contrary has been seen by the Commission. It is apparent that this company has not been concerned with any of the matters complained of, and this report has no reference to its activities.

Maritime Steel withdrew from the Council on February 7th, 1948. No evidence has been submitted to the Commission tending to contradict the Director's statement that the company has apparently conducted its affairs independently subsequent to that date. This report therefore does not refer to any activities by Maritime Steel.

Concerning Robertson-Irwin the Statement of Evidence says (paragraph 210. (7)):

"In 1948 Robertson-Irwin started to manufacture metal culverts and arranged to become a member of the Council at the beginning of 1949."

However, the return of information made to the Director on behalf of the company states that it began the manufacture and sale of metal culverts in 1947 (at which date the company's name was Thomas Irwin

& Son Limited, being changed in September 1948), that it was associated with the Council from July 1947 to May 1952, and that fees were paid to S. J. Frame, the Council Secretary, in each of the years 1947 to 1952 inclusive. From the return made to the Director by Thomas Sill, the Western Secretary, Robertson-Irwin had a representative in the Western Group from early 1953 and made payments to him for fees and expenses.

Concerning Pedlar the Statement of Evidence says that the company withdrew from the Council on January 7th, 1948, but continued to participate to a limited extent in Council activities. In paragraph 210. (6) the Statement of Evidence alleges that after the beginning of 1948 Pedlar continued to co-ordinate its policies relating to the sale of metal culverts with those of the members of the Council. Counsel for Pedlar, in argument before the Commission, stated that there was a distinction in Western Canada in that Pedlar had continued to be a member of the Western Council after 1948, though no decision could be taken based on information obtained by Pedlar officials at western meetings, except by the head office at Oshawa (Hearing, pp. 870-1).

It may be noted that Pedlar's letters of resignation of January 7th, 1948 included one of resignation from the Western Section of the Council and further that Pedlar made no payments to Thomas Sill.

Pounder was not incorporated until July 1948. It became interested in the culvert industry late in 1950 when it became associated with the newly incorporated Rosco Culverts (Manitoba) Limited, now Rosco Metal Products (Man.) Limited. From that time till December 1953 Pounder acted as a distributor and sales representative of Rosco (Man.). During that period also Pounder or its nominees owned shares but **not** a controlling interest in Rosco (Man.) and its President and Vice-President were Directors of Rosco (Man.). In December 1953 the arrangement with the Rosco company was terminated. Since then Pounder has not been associated in a shareholding or management way with any metal culvert manufacturer. Pounder began to manufacture metal culverts in February or March 1954.

Pounder has never been a member of the Council, nor has it made any payments to it for dues or otherwise. However, F. C. Dempsey, its Vice-President and Sales Manager, attended several meetings of the Western Group. From his own evidence and that of Thomas Sill it is apparent that he attended meetings both during and after the period of Pounder's association with Rosco (Man.).

None of the four western Rosco companies has been a member of the Council, i. e., of the Western Group. However, the parent Rosco is a member. It made payments to S. J. Frame for services as Secretary until his office was closed in 1952, and subsequently made payments to Sill, Patrick and Company for services on behalf of the Metal Culvert Council (Western Section), these payments continuing down to the date of the Inquiry. From the evidence of M. A. Buell, General Sales Manager of Rosco, the parent Rosco controls the sales policies of all the western Rosco companies. Mr. Buell also stated that Canada Culvert is a company associated with Rosco, and that he virtually dictates its sales policy. Consequently, for many purposes of this report all of the Rosco companies, together with Canada Culvert, are regarded as one business organization.

From the returns made by them to the Director it is established that all the other culvert manufacturers with plants in Eastern Canada, viz., Armco, Canada Culvert, Corrugated Pipe and Westeel, were members of the Council and made payments to S. J. Frame as Secretary until Mr. Frame's office was closed in 1952. From these returns and from that of Thomas Sill it is also established that Armco and Westeel have been members of the Western Section or Western Group. Since 1952 they have made payments to Mr. Sill for fees and expenses.

Mr. C. H. Richardson, founder of the company, stated that Richardson had been a member of the Council all through its existence and paid fees to Mr. Frame until 1952. From his evidence, the company's return of information and that of Mr. Sill it is clear that Richardson has been a member of the Western Section and since 1952 has made payments to Mr. Sill for fees and expenses.

#### 4. Functions of the Secretaries: Position of Thomas Sill

One of the functions of the section offices was the preparation and distribution to members of the sections of price lists, circular letters or bulletins and other material relating to the pricing of metal culverts in their respective sections of the country. The Winnipeg office was still performing this function when evidence was taken by the Director during the Inquiry. Since Mr. Frame's retirement and the closing of the Toronto office in 1952, pricing material has been distributed in the East by Armco. Evidence relating to the origin, development, purpose and use of these price lists and other pricing material will be examined in the next chapter.

The Statement of Evidence describes the Secretary's role in both East and West as being largely mechanical and clerical. It says that it "consisted principally of working out detailed lists of prices incorporating changes decided upon by the Section and of circulating

these lists and other pricing information."

The Commission agrees with this statement of the functions of both Eastern and Western Secretary. However, since Thomas Sill is one of the parties against whom allegations are made in the Statement of Evidence, it is necessary to examine his position further. There is no suggestion in the evidence that Mr. Sill has ever been engaged in the business of manufacturing culverts or that he has been interested in or associated with any culvert manufacturer, other than in the capacity he or his firm has held as Secretary of the Western Section of the Council, or of the Western Culvert representatives. In our opinion, none of the documentary evidence points to the conclusion that his duties were other than clerical or that he had any authority to act except on specific instructions. The language in some of his communications to the Western Group taken by itself is consistent with the position either of one who is giving instructions or of one who is passing on information according to instructions given to him, but there is nothing in the documents to strengthen the view that the former is the true interpretation of his position. All the oral testimony is to the contrary.

From all the evidence relevant to the position of Mr. Sill the Commission has formed the definite opinion that he had no voice in the making of policy decisions among the Western Group and that in any actions taken by him he was simply carrying out the requests or instructions of the Western Group, or one or more of its members. It is inconceivable that he did not know something of the purposes for which pricing material was distributed, but his relationship with the group was such that, in our opinion, he should not be held responsible for any arrangements or practices between them.

## CHAPTER IV

### ARRANGEMENTS AND PRACTICES AMONG THE METAL CULVERT MANUFACTURERS

#### 1. The Pricing System

The allegations made by the Director in the Statement of Evidence are concerned almost entirely with the price or matters related to the price of metal culverts sold by the manufacturers. Before looking at the evidence relating to these allegations a brief explanation of the pricing system in the industry is desirable.

The pricing system is somewhat complex. We have already seen that metal culverts may be classified in various ways, viz., according to the basic material used, the type of corrugation, the shape of the culvert, the absence or presence of protective coating and the type of protective coating used, or the method of manufacture, this last classification making the distinction between culverts that are fully fabricated at the factory and those made as nestable pipe or in sectional plates. We have also seen that metal culverts are of many sizes and different weights. Provision has been made for these factors in the pricing system followed in the industry.

Other factors also have been taken into account in the pricing system. Thus it has long been the practice for the price of a culvert to vary according to the type of purchaser, there being three classes of customer for this purpose, railway, government and municipal. Railways provide their own transportation. They are therefore charged a f.o.b. factory price, no freight being included. Prices to railways also differ from those to other customers because an extra charge is made to them for couplers (coupling bands used to join lengths of culvert together). For other customers, the price of culvert includes the couplers if ordered at the same time as the culvert, the price being set higher to allow for the cost of the couplers.

The position with respect to government and municipal prices is well described in the Statement of Evidence:

"Government prices are the prices to both the Provincial and Federal Governments, and to certain Provincial and Federal Boards, Commissions and similar bodies. Basically prices to both governments are the same but sales tax is applied on purchases by the Federal Government while those of the Provincial

Governments are not subject to this tax. In some instances a single price list has been used with a notation that a certain percentage was to be added or deducted, as the case might be, for sales tax. The more usual practice has been to set up separate lists because of the possibility of error or of different treatment of fractions where percentage adjustments were made.

Municipal prices are those charged to municipal authorities and to customers for whom no special provisions are made. They are usually slightly higher than Government prices - at the beginning of 1955 for example, Municipal prices in Ontario were 5 1/2 per cent higher than Government prices plus tax. Some of the witnesses stated that the reason for this is that municipalities and similar customers to whom these prices apply normally buy in small quantities. Also, many municipal sales are made through dealers, who are paid a commission, and presumably this factor is taken into account in setting these prices."

Again, price may be affected by the place of delivery. Prices in British Columbia, like those to railways, are f.o.b. factory prices. Elsewhere in Canada prices are delivered prices within wide areas. In other words, the price to a given customer is the same, whether he takes delivery near the factory or at a point far from it, provided the points are within the same delivered price area. The cost of delivery is taken into account in setting the area price. Again, since carload freight rates are substantially lower than those for smaller quantities the delivered price for a carload has at some times and for certain classes of customers been lower than that for a less than carload purchase. The Provinces of Nova Scotia, New Brunswick and Prince Edward Island form one price area. In general each of the other provinces is a separate price area, except that at times Ontario has been divided to form two areas.

The manufacturers all make use of price lists, and it is clear from the foregoing description that under the pricing system followed in the industry quite a number of lists is required if prices are to be readily available for all types and sizes of culverts for all classes of customers in all pricing areas.

Some of the manufacturers do business in one or a few provinces only, while others do business in all parts of Canada, but every manufacturer requires a series of lists for every price area or district in which he sells culverts. Thus for each such area he requires one municipal list, one railway list and one or two government lists giving the selling price for the various sizes of ordinary round galvanized pipe. He needs similar lists for pipe arch and arch and again for coated pipe and for paved and coated pipe. In

actual practice the number of lists has been reduced to some extent by placing separate columns for two or more types of pipe (e.g. coated pipe and paved and coated pipe) on one sheet of paper, or by stating that the application of a certain differential to the prices shown on one list will produce the prices for another. However, after making full allowance for such devices, many lists remain necessary.

## 2. Uniform Price Lists

One fact about which there is no conflict of evidence is that the price lists published from time to time by the several companies have contained identical prices for the same type and size of culvert to the same class of customer in the same price area. Only one very minor exception to this general picture has appeared. In the evidence of F. C. M. Forster of Corrugated Pipe we find the following:

"Q. What do you do on the occasion of price changes since June 1952, or perhaps I should ask what have you done in the case of each price change?

A. I have received prices and I have changed mine accordingly to suit them.

Q. You have received prices from whom?

A. From Armco.

Q. And you have changed your own accordingly?

A. That is correct.

Q. Is that true of every change that you have made since June, 1952?

A. I have varied my prices the odd cent here and there occasionally, yes.

Q. I just do not quite understand what you mean there?

A. I have not copied their prices penny for penny, no."

(Evidence, pp. 70-1)

And again:

"A. There has been several times when various items on my price list have been a penny or two lower, where I felt I could shade the price by very little.

- Q. When you say a penny or two, what percentage might that be?
- A. On the smaller sized pipe that would amount to possibly 3 per cent.
- Q. Was there any particular reason for your doing that in the years you have mentioned and not in other years?
- A. Well, competition was pretty tough and I was trying to increase my business. I tried --
- Q. In other words, in some years competition is tougher than others, is that the situation?
- A. That is right."

(Evidence, pp. 86-7)

### 3. Adherence to Published Prices

While uniformity of published prices has been complete to all intents and purposes the inference should not be drawn that the prices actually charged by the several companies on individual sales have always agreed with their published prices. Almost all the officials of companies who gave evidence were examined on this point. Some recalled no instances in which they had found competitors selling or offering to sell at lower than list prices and stated that their own respective companies did not cut prices. Others stated that in a few instances their companies had quoted below their list price, perhaps to meet a price they heard a competitor had quoted, and perhaps, as one witness put it, because the company was "hungry for business". One said that on many occasions over the years his company had sold below its list price on bulk contracts, notably in western National Parks in 1955, but that provincial governments and municipalities bought at list prices. Another stated that in 1955 he had bid on some ten contracts with the Federal Government for his company, had received no contract, and had been told by government officials that prices from competitors had been more favourable. Practically all the witnesses were in agreement that sales below list price were unusual.

In the Commission's view the evidence points strongly to the conclusion that throughout the period covered by the inquiry the great majority of sales have been made at list prices by all companies and that departures from list prices have been very much the exception. One qualification to this general conclusion requires to be noted. During the year or two prior to evidence being heard in the inquiry, some large buyers had begun to call for competitive

tenders, either for a year's supply or for a specific job. Previously the regular practice, still followed in most cases, had been for the manufacturers to submit their price lists at the beginning of the year to such steady buyers as government departments, railways and some municipalities, and for orders to be placed from time to time on the basis of those lists. The growth in recent years, particularly in 1955, of a practice by some buyers of calling for tenders appears to have had some competitive effect. At any rate, most of the instances cited by witnesses in which lower than list prices had been quoted had to do with tenders in 1955. However, the portion of the market affected by this development appears to have been very small up to the date of the inquiry.

#### 4. The Basis of Uniform Prices

How has it come about and how has it continued to be true that the prices shown on the culvert price lists of the several manufacturers with whom this inquiry is concerned have been for many years identical, and that the manufacturers, in making sales, have adhered to those prices with few exceptions? This is an important question on which two opposing theories were advanced to the Commission. Counsel for the manufacturers maintained that on the basis of the evidence this industry afforded a typical illustration of one dominant firm establishing its own prices which prices were then adopted and followed by all the smaller firms. The Director contended that in this industry uniform prices were established and uniform price changes made as the result of agreements or arrangements arrived at through meetings and discussions between officials of the manufacturers against whom his allegations were made. The evidence requires examination.

##### (a) Evidence Supporting the Theory of Price Leadership

Without exception officials of the various companies concerned in this inquiry who gave evidence stated that Armco was the dominant manufacturer in the field and that their own company had simply followed Armco prices, which they received sometimes from Mr. Frame's office or Mr. Sill's office, and sometimes from Armco directly. Officials of the smaller companies stated that in effect they had no alternative course available to them. It was repeatedly stated that Armco's dominant position was due to a number of factors, e.g.:

- (i) it was a mill outlet for a large steel corporation in the United States,
- (ii) it had a much larger share of the Canadian market than any other company,

- (iii) it was the only company possessing a large research department staffed with trained engineers and technicians, as a result of which,
- (iv) it had been the initiator of practically every innovation or improvement whether in design or composition that had been introduced in the metal culvert industry down through the years.
- (v) it possessed manufacturing plants in various provinces right across Canada.

In consequence of this dominant position it was said that Armco was able to produce metal culverts more efficiently and more cheaply than its competitors and that it was, therefore, in a position of natural price leadership. Several witnesses stated that if their companies had attempted to fight Armco pricewise, Armco would have been able to put them out of business, or as one witness stated "out of profit".

It was asserted that the uniformity of price found to exist for the products of all the companies resulted from following the leader and not from price agreement. It was said that other companies when making up their own price lists from time to time, simply copied the prices shown in the Armco price list.

The evidence of company officials further indicates that the complete dependence of all other companies upon Armco for price leadership, which was alleged by them to be the true picture, had existed for many years in both Eastern and Western Canada and was not affected in any material way by the abandonment in the East of the Metal Culvert Council when Mr. Frame's Toronto office was closed in 1952.

The following extracts may be regarded as typical of the many passages in the oral evidence relied on as supporting the theory of price leadership:

From the evidence of Mr. E. L. Campbell (Armco):

"Q. I am not speaking of actual sales, I am speaking of the published prices put out by your company and I am trying to determine whether they were the same or whether they were different from those issued by the Metal Culvert Council.

A. What do you mean, over the years?

Q. Over the years, yes.

A. I do not know as I can say that we ever sent out any printed price lists different than that, but may I make this comment. Our company, of course, is the leader, you might say, in the industry, and any discussions that representatives of our company had in meetings of the Metal Culvert Council, we would usually have a pretty definite idea of any change that we felt was necessary in prices before we went to the Metal Culvert Council meeting, in those days in which that occurred.

Q. Yes?

A. We would come away from that meeting and go ahead and send out any price changes that we felt necessary. I think I would be safe in saying that the discussion on any general pricing in the Metal Culvert Council was influenced a great deal by what opinions we had from our market analyses, and our Cost Department, and the discussion at the Metal Culvert Council meeting would either confirm or, I do not know whether I could even say influence perhaps the recommendations. We would come out and go ahead and publish those prices."

(Evidence, pp. 294-5)

Again:

"A. . . . I feel our company has in the last three to four years since the Metal Culvert Council went out of existence, has developed the confidence of the other companies in our discussion. In fact I recall one man saying, without any discussion of prices, several years ago, 'Well, we feel you people know this business and you know what you are doing; any time you change prices, we have enough confidence in the way you run your business and the reasonableness of it, that we would without any long discussion or anything, or without presumably the inference --' Without too much cost checking and what not, they would be inclined to follow our lead.

Q. Is your experience --

A. I think that has been relatively the situation since the Metal Culvert Council went out of existence.

Q. Has your experience been that your prices have been followed by the other manufacturers since?

A. You ask what our experience has been. I am not too sure

what other companies have done, but it is my impression that most of the companies have followed our lead to a great extent, but I do not think that is all-conclusive by any means. . . ."

(Evidence, pp. 500-1)

From the evidence of Mr. D. H. Haverson (Robertson-Irwin):

"Q. Has Robertson, Irwin Company Limited in fact changed its policy as to the discount or commission it will pay to dealers since the Metal Culvert Council disbanded?

A. No, Robertson, Irwin did not change it. We just followed along in behind the Armco people.

Q. You followed whatever practice they were following?

A. That is correct."

( Evidence, p. 544)

Again:

"Q. Let us take last year. Have your prices in your experience compared with those of other metal culvert firms?

A. Our prices, as I mentioned, are the same as Armco, for I simply ask Mr. Campbell for his price list. I personally recognize the Armco people as the leaders in the culvert field and Robertson, Irwin, shall we say, having limited experience, and I approach him directly and ask him for his price list and he obliges."

(Evidence, p. 551)

From the evidence of Mr. M. A. Buell (Rosco):

"Q. What information have you received from Sill's office over the years?

A. List prices only. To clarify, until 1952 I believe Sill was an employee of Frame's.

Q. Yes. Has your company made any price changes since the Metal Culvert Council disbanded?

A. Yes.

Q. Who has been responsible for the setting of new prices in those cases?

A. Armco have said they were going to do something and we had to follow."

(Evidence, p. 599)

Again:

"Q. What is the relationship between the lists you have received from Armco respecting Western Canada and the lists you have received from Sill's office respecting Western Canada?

A. You are speaking from 1952? Since that time Sill has continued to send out list prices, but those lists were virtually dictated by Armco, even though Sill prepared them.

. . .

A. . . . They are the leaders, they were in Western Canada before any of us were and they could run us all out of gas. to use --"

(Evidence, p. 604)

And again:

"Q. What sort of things were discussed at meetings of the Institute [Council]?

MR. McKAGUE: Eastern or western?

BY MR. MacLEOD:

Q. Take the eastern first?

A. Merchandizing policies, and prior to its disbandment in 1952 there were discussions regarding prices.

Q. How was the price issued by Frame finalized?

A. On instructions from Armco.

Q. What type of discussion occurred in the meetings in the west?

A. The same thing.

Q. Were there discussions of prices in the meetings in the west?

A. Yes.

Q. Do you recall occasions on which suggestions for different amounts of change were made by different manufacturers?

A. Yes.

Q. Can you recall any such case specifically?

A. You mean where there was not complete agreement as to what amount the change would be, what amount of change would be necessary?

Q. Yes?

A. I recall such discussions; I do not recall a specific discussion, but the man who wrote the lowest ticket controlled.

Q. Was that always Armco?

A. Well, I would say 95 per cent of the time, yes."

(Evidence, pp. 607-8)

From the evidence of Mr. G. W. Sunderland (Westeel):

"Q. How do you set your general prices in relation to the costing basis on particular jobs?

A. Our prices come from Armco.

Q. Do you accept them without question?

A. Well, we like to argue but we know very well we have to go along with them if we want to stay in the culvert business.

Q. Will you expand on the idea that you have just expressed, that you have to go along with them?

A. Armco are what we call a mill outlet. They have a tremendous backing. They have the biggest engineering

and research department in America, probably in the world, in culverts. They have all those resources. If we wanted to indulge in a price war with them I am sure they could run us right out of business, at least run us right out of profit.

Q. Do you feel it necessary to follow their prices?

A. Yes."

(Evidence, p. 696)

Again, being questioned about price discussions in the Metal Culvert Council:

"Q. Did the discussions become animated?

A. Animated; not obnoxious; animated, yes.

Q. Will you just relate that to your statement that Armco set the prices and that was it.

A. I did not say that they set the prices and that was it. They set prices and those prices stood generally, but they were gracious about it. We did not have everything shoved down our throats in a take it or else manner, but everybody understood, there was a tacit understanding that Armco's prices would go."

(Evidence, pp. 707-8)

And again, referring to discussions among eastern manufacturers at meetings after the Council was disbanded in 1952:

"A. They were much less formal. If there were new prices, Armco would come to the meeting with those prices. There was not any question of Frame passing them through his mill. You knew that is what it was going to be.

. . .

Q. Since the Metal Culvert Council disbanded they presented to the meetings price sheets setting out the prices they proposed to put into effect?

A. Yes.

. . .

Q. Would there be any discussion of such sheets either before or after they were presented?

A. Discussion only after.

Q. What would be the nature of that discussion?

A. Well, certain things that we did not like. I have previously mentioned that there was always difference in point of view regarding dealers, fringe items, minor items; the basic prices were not changed that I remember.

Q. Would any intimation be given to Armco that the prices would be followed?

A. Just the tacit understanding. I have never said, 'I will do thus, I will do that.'

Q. Would you just expand on your expression 'tacit understanding'?

A. Ever since I have been connected with culverts it has been taken for granted that we had to go along with Armco prices."

(Evidence, pp. 720-2)

Much additional oral evidence, together with some of Armco's technical literature, e.g., "Handbook of Drainage and Construction Products" (Exhibit W-1), were tendered to illustrate both the extent of and the reasons for Armco's dominance in the metal culvert industry in Canada. However, since Armco's dominance has been recognized by all parties in this inquiry it is unnecessary to examine the evidence in detail. The Commission accepts as a fact that Armco is and has been for many years by far the leading manufacturer in the metal culvert field, but inclines to the view that the degree of its dominance has been somewhat exaggerated. We note, for example, that the culvert production and sales of two competitors added together, have been, in each of the last five years for which figures were available, 1950 to 1954, approximately equal to the culvert production and sales of Armco. We note also that whereas at one time culverts and related products were the only products manufactured by Armco and in recent years have constituted from 40 per cent to 50 per cent of its volume, the culvert production and sales of each of the two competitors constitute a very much smaller proportion of its total business. They are well established organizations obviously obtaining a substantial volume of business both in culverts and other products. Under these circumstances the Commission finds difficulty, on the evidence submitted to it, in accepting the argument that such firms are in such a position that their policy with respect to culvert selling prices need be completely subordinated to that of Armco.

(b) Evidence Relating to the Theory of Price Agreement or Arrangement

While practically all the evidence supporting the theory of price leadership or "following the leader" is oral, there is a considerable volume of documentary as well as oral evidence bearing on the question whether or not uniform prices resulted from agreements or arrangements between the manufacturers.

The documentary evidence from the period prior to the end of World War II is slight. Considerable reliance was placed by the Director upon Exhibit T-2, already referred to. The source from which this document came is not in evidence. Apparently neither it nor any copy of it had been found on the premises of any of the companies or firms with which this inquiry is concerned. It was identified by Mr. E. L. Campbell (Armco) as a copy of the rules of the Metal Culvert Council that had been in effect some years ago, but which he had not seen since probably sometime prior to World War II. He spoke of the document as being "quite prehistoric". Questioned concerning a letter written by him to his Winnipeg manager in 1953, in which he had said "it was agreed to add a few words to our old historic rules (which nobody keeps on file)", he stated that this was a humorous comment, that he could not remember when he had seen what used to be the old rules of the Metal Culvert Council, and that he knew his Winnipeg manager "didn't have any rules around anymore" (Evidence, pp.336, 337, 340).

Mr. Campbell's evidence to the effect that the provisions set out in Exhibit T-2 had not been in effect for many years is supported by the fact that no other company official who was questioned about it was able to identify the document. Some had never heard of it.

Exhibit T-2 is a mimeographed document of standard legal size. It consists of some thirty-six pages plus a two-page index. On the outside of its blue cover are the words:

"Schedule of Metal Culvert Council (Eastern Section)  
Date - January 2, 1930"

Every page but two of the document bears the date January 2, 1931, but some of the provisions in the document bear earlier dates. The two exceptional pages are dated January 2, 1930. Each of these two pages contains a list of prices and is placed next to a page with the same page number covering exactly the same subject matter, and dated January 2, 1931. The reasonable inference is that Exhibit T-2 is a compilation of material brought up to date as of January 2, 1931.

The first seventeen pages of Exhibit T-2 contain many rules covering a variety of matters. There is first of all a statement of Basic Principles of the Metal Culvert Council designed to protect the buying public by assuring good materials, design and workmanship,

honest advertising and "no bribery" of public officials for the purpose of securing business. The statement of basic principles states that for the protection of the manufacturer of good culverts in Canada the Council "proposes to set certain minimum schedules, to be revised from time to time, that will ensure the manufacturer a fair profit", and that it "proposes to insist, for the protection of the buyer and the future of the industry, that the manufacturer does use such materials and does maintain the standards and schedules set". A list of minimum materials specifications follow. This is followed by a code of ethics for the members. Then there are rules concerning the division of the Council into two sections and membership therein. There is a provision for investigation by the Secretary of alleged breaches of the Council agreement, and for the fixing of compensation to be paid by the offending member. It may be noted here that there is very little evidence before the Commission that this provision for investigation and compensation was ever used. In one instance back in 1937 Pedlar suggested to Canada Ingot Iron Company Limited (now Armco) and Metallic Roofing Co. of Canada Ltd. (now Westeel) that such a course of action might be taken, but as matters developed apparently no investigation was undertaken. Again in 1950 Pedlar asked Mr. Frame to investigate prices quoted to the government of Newfoundland, but what Mr. Frame did about it is not established. Mr. E. L. Campbell said that in all the years of his experience he had never known of any such investigation.

There are rules concerning agents, dealers, discounts, the charges to be made for coupling bands and various other matters.

The latter portion, approximately half, of the document consists of price lists for culverts and related products to various classes of customers in the several provinces of Eastern Canada, each page containing rules for the application of the prices listed therein.

Examination of Exhibit T-2 indicates that for some years, continuing at least to 1931, the Metal Culvert Council had a fairly complete body of rules for, and approved by, its members, in matters relating to price and conditions of sale, as well as to the basic principles and ethics of the Council and its members. The document would be of much greater significance if copies of it, or documents similar in scope, had been found on the premises of one or more members, particularly if such copies or documents were shown to be of recent origin. Such is not the case however, and there is no evidence that any such complete body of rules has been in use for many years. On the other hand Exhibit T-2 is not entirely devoid of significance in later years. Officials of some companies, referring to a period many years subsequent to 1931, stated they had received or possessed a schedule of prices which also contained other material, including material on ethics similar in whole or in part to page 3 of Exhibit T-2. One said that he had seen a document somewhat similar to

T-2. None had seen a document containing as much information as T-2.

There is also some documentary evidence that some of the material in Exhibit T-2 had not fallen into disuse. For example, Serials 5247-9, found in files of Rosco (Sask.), consist of three sheets dated January 7, 1952, marked at top and bottom with what appear to be page numbers 34, 35 and 36. These sheets, except for the elimination of provisions that appear to be objectionable under the Combines Investigation Act, are word for word copies of pages 3, 1 and 2 of Exhibit T-2, headed respectively, Ethics, Basic Principles of the Metal Culvert Council, and Raw Materials for Culverts. A letter dated June 21, 1951, from Mr. M. A. Buell (Rosco) to Rosco (Man.) (Serials 3170-1), contains exactly the same material and language as Serial 5249, described as a "minute from the records of the Metal Culvert Council".

In later years in Eastern Canada, prior to the dissolution of the Council in 1952 there were apparently a number of sheets circulated to the members by the Secretary and amended when deemed advisable, these sheets containing "Sundry Rules" or "Sundry Information". No copy of these Rules is in evidence, but they are referred to in some of the correspondence in a fashion which makes it clear that at least some of them were concerned with pricing and apparently resulted from agreement between the members. One example is found in Serial 2653, a letter from Mr. E. L. Campbell (Armco) to Mr. S. J. Frame, dated May 10, 1948:

"Re: Price for Coated Pipe

In phone conversation late last week with Mr. Kellington of the Pedlar People, it appears that there is still some question about how painted or dipped pipe shall be quoted.

On page 11 of the Sundry rules of November 4th, 1947, is the following instruction 'Painted or dipped pipe shall be figured at half way between the price of plain pipe and paved and coated pipe'.

Since our price schedules do not have a specific heading 'Paved and Coated Pipe' this has apparently not been too clear. The fact is the price for full coated paved invert pipe is that headed by the words 'Asbestos Bonded'. It has always been our practice to quote these prices under the heading 'Asbestos Bonded' for all pipe that is fully coated and paved, regardless of whether the pipe is made with a galvanized sheet or an asbestos bonded sheet. We had thought that other companies did the same thing.

We suggest that it would be more clear if the Sundry rule above is reworded as follows:

'Painted or dipped pipe shall be quoted at a price half way between the prices shown in the schedules under the headings "Plain Pipe" and "Asbestos Bonded Pipe".'

We also suggest in the sake of clarity the following.

'All pipe to be fully asphalt coated and paved shall be quoted the price in the schedules under the heading "Asbestos Bonded", even though a plain galvanized sheet is used in this product'."

(Serial 2653)

In evidence Mr. Campbell stated that he thought the reference to sundry rules meant the price schedules sent out by Mr. Frame (Evidence, pp. 385-6) . The Commission considers, however, that they were rules used in conjunction with the price schedules rather than actual price schedules.

Another instance is found in Serial 4438, a copy of a letter from Mr. S. J. Frame to Messrs. Sill, Patrick and Company dated March 11, 1950:

"Metal Culvert Council  
Municipality of Fort William

Your letter of March 7th:

On inquiry I find that 10% discount was quoted the Municipality of Fort William on Sewer work. The said discount is provided for in the following understanding adopted this year:

'Culverts for  
Sewers

Culverts for Sewers - Minimum price  
10% discount off Municipal List applying to  
Province in which job is situated.

On sales of Culverts for Sewers made  
through

Hardware	) Who
Builders Supply Deal-	) by [sic]
ers	) for
Road Contractors	) resale
General Contractors	)

maximum Discount of 10 and 5% off  
Municipal List applying to Province in  
which job is situated.'

The above is in the 'Sundry Information'

As advised you in a previous letter, the Sundry Information is not yet complete and to avoid confusion by issuing Culvert information from this office in further instalments, this office as soon as it receives the further information required will be issuing complete schedule containing Sundry Information.

This office is endeavouring to hurry up the sending here of the further information still required."

(Serial 4438)

For the period since 1952 there is no evidence before the Commission concerning the issuing or circulation of "Sundry Rules" or amendments thereto, but there is evidence that on at least one occasion at the end of 1953, when price changes for 1954 were under discussion, a memorandum prepared by Armco, following a meeting of representatives of five eastern companies, may have served the same purpose as an amendment to "Sundry Rules" (Serials 2801-2, 2808-9, 2811-2). The memorandum referred to (Serials 2811-2) is headed - "Notes on Culvert Pricing Discussion . . . . . December 21st, 1953", and is marked - "For Attention: Branch Managers". It is two full pages in length and consists of fifteen numbered paragraphs and one lettered subparagraph dealing with price changes of various kinds to become effective January 1st, 1954. The memorandum was sent by Armco to its several branch offices. The price changes were put into effect by the manufacturers and it may be noted that Rosco sent an almost identical memorandum (Serial 660-1), dated January 8th, 1954 to its branch managers. It can only have been copied from the Armco document.

In Western Canada the practice developed for the Western Secretary to distribute to the western members some four or five sheets bearing the heading - "Metal Culvert Prices - Western" - and having at the bottom of each sheet the words - "General Information" - and page numbers G 1 to G 4. They contain a number of pricing rules and were apparently intended to be placed by the member companies at the front of the price schedules containing their price lists. Copies of such sheets were found in the possession of all the western companies. Some of these sheets had been retyped by the particular company, but the material in them was not changed materially, except in the case of Pedlar, whose sheets differed substantially from those of other companies.

Reverting to the period before the end of World War II there is some documentary evidence, in addition to Exhibit T-2, which points to the conclusion that uniformity of culvert prices was maintained by discussions at meetings and agreement between manufacturers. One instance from Eastern Canada is an eight-page document dated December

28, 1938, from the files of Maritime Steel, then a member of the Council, consisting of an index page and seven pages of memoranda. Two pages of these memoranda read as follows:

"Dec. 28-1938

MEMO - H.S.C.

Copy of letter from S. J. Frame.      Dec. 20-1938

J. W. Cumming Mfg. Co. Ltd.,  
New Glasgow,    N. S.

Dear Sirs:                      Metal Culvert Council  
                                    Notice of meeting (Eastern Section)

Please take notice of important meeting of Eastern Section which will be held at this office on Thursday, Jan. 5, 1939 at 2.00 P.M.

At the said meeting consideration will be given to revision of the schedules in the light of recent ruling of the Dominion Government as to sales tax on metal culverts and reduction in prices by mills on galvanized sheets.

Reminder of the meeting will be sent you in due course ahead of time.

Yours truly,  
S.J. Frame, Sec'y.

We are opposed to any further reduction in culvert prices at this time.

SALES TAX:      About 99% of our culverts are sold to the Provincial Government, therefore sales tax ruling does not effect [ sic ] us as it does others whose sales are largely municipal.

SHEET PRICES: We had two reductions in sheet prices totalling \$6.00 per ton during the season, however their prices may be up again before you can get the new schedules out.

It is not a matter of luck that the culvert business has held up in Nova Scotia better than in some other districts. We therefore think we should be able to judge the situation pretty well and in our opinion

present prices should be maintained."

(Serial 7570)

"Dec. 28-1938

MEMO - H.S.C.

Extracts from minutes of the Culvert Council.

Re: Air Ports Only

'Stream Enclosures and Sewars [ sic ] (storm, sanitary, combined, outfalls) Sub-drainage System (airports only)

The following procedure on such special quotations shall apply -

Any member desiring to quote special prices shall file same with Secretary (in the case of the Western Section with the Secretary's representative at Winnipeg) prior to quoting and enquire at the same time if any other member has filed a price or prices for the same job.

Such filed price shall indicate clearly the location of the job.

The first member to so file a price for a specific job establishes a minimum unless a change is made and agreed to by all those who have advised the Secretary that they are quoting on the job.'

The above in our opinion leaves the matter too open. Some member may take a notion to meet prices of cheaper types of drain pipe and we do not think this is necessary as we are sure a fair amount of business can be got on the regular schedule. We would therefore move an amendment that the reduction be not greater than say 10%."

(Serial 7571)

The index page has in the upper left corner the typed name and place H. Scott Cameron, New Glasgow, N.S.

From the files of the same company is Serial 7575, a telegram from Toronto, dated January 5th, 1939, reading as follows

"J. W. Cumming Mfg. Co.  
New Glasgow NS

Leaving for Montreal tonight Maritime prices left as is  
except no sales tax for Miscellaneous sales

H Scott Cameron"

(Serial 7575)

This clearly refers to the meeting mentioned in the first  
paragraph of Serial 7570.

An instance from Western Canada is Serial 5696, from the  
files of Westeel (Regina):

"Mr. C. T. Dempsey

' C O P Y '

MINUTES of meeting of the Western Section Metal  
Culvert Council held in the Office of the Secretary, 203-4  
McArthur Building, Winnipeg, on Tuesday, May 28th, 1940,  
at the hour of 2:00 o'clock in the afternoon.

PRESENT:

Mr. R. T. Stuppard	-	The Pedlar People, Limited,
Mr. E. L. Campbell	-	The Canada Ingot Iron Co. Ltd.
Mr. J. E. McAuley	-	Western Steel Products Corp'n. Ltd.

Culverts with                      The following prices for sloped ends were  
Sloped ends presented to the meeting:

'Slope 4:1 with a 6" drop at the beginning of the  
slope, also a 6" drop at the end or lower part of  
the slope, will be the same prices per foot as the  
total length of the bottom of the pipe up to and in-  
cluding 30" diameter culverts.

On 36" diameter culverts we will charge on the  
basis of the total length of the bottom of the pipe  
less 4 feet.

On 42" diameter culverts we will charge on the  
basis of the total length of the bottom of the pipe  
less 6 feet.

On 48" diameter culverts we will charge on the basis  
of the total length of the bottom of the pipe less 8  
feet.

The Canada Ingot Iron Co. Ltd. and Western Steel Products Corp'n. Ltd. were in favor of adopting these prices, and the Pedlar People Limited, Richardson Road Machinery Co. Ltd., and B.C. Tractor Equipment Limited are requested to advise the Winnipeg Secretary as promptly as possible whether they are in agreement with these prices.

#### Northern Alberta Railways

Whereas the Northern Alberta Railways now require all couplers to be 13" wide, it was therefore

Duly moved and seconded that the Northern Alberta Railways be charged one and one-half times the foot price of pipe for such couplers.

#### Airport Prices

On motion it was decided that prices on all airport jobs are open pending further discussion upon receipt of reply from the Eastern Section to the resolution of the Western Section forwarded to the Secretary at Toronto in Minutes of the Western Section of February 27th, 1940, but special filing basis to be continued on all sewer work.

#### Oil Companies

On motion it was decided to quote all oil companies the Municipal List less 10% discount.

The Meeting then adjourned.

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Copies to: Canada Ingot Iron Co. Ltd. )  
The Pedlar People, Limited, ) Winnipeg  
Western Steel Products Corp'n.)  
Richardson Road Machinery Co. Ltd., Saskatoon  
B. C. Tractor Equipment Limited, Vancouver  
S. J. Frame, Esq., Toronto 2, Ontario  
HUBERT READE AND COMPANY, C.A.

(Serial 5696)

Questioned concerning this document Mr. E. L. Campbell stated that he could hardly remember the meeting (in 1940), but that he had attended western meetings during the time when Hubert Reade

was Secretary, that he could not recall any inaccuracy in the minutes of those meetings, that the discussions were always very informal but that Mr. Reade always wrote them up in great formality, which was a bit misleading and threw a wrong light on the meetings (Evidence, pp. 365-7).

As the Commission is chiefly concerned with the situation in the industry in the post-war period only one further example prior to the end of 1945 is mentioned here. This is a paragraph from a three-page letter dated May 9, 1944, from Mr. E. L. Campbell (Armco, then Canada Ingot Iron) to S. R. Ives (American Rolling Mill Co.). The paragraph is taken from the second page of the letter:

"Our whole question of prices on culverts for the post-war is still quite indefinite. I believe that regardless of whether the Metal Culvert Council continues or becomes extinct in the East, this will be continued in the West between the three companies here at Winnipeg and the one at Saskatoon. That is already generally agreed upon, and Western Steel and myself have certain ideas of a different base structure on plain galvanized than the pre-war, getting back to f.o.b. plant quotations."

(Serial 2592)

The documentary evidence in connection with uniform prices is much more voluminous in the post-war period, and may conveniently be examined under several heads.

(i) Meetings, Memoranda and Correspondence

For the whole of this period the minutes of only one meeting of the Eastern Section of the Council are in evidence, perhaps because the eastern office was closed in 1952. No minutes of eastern meetings since 1952 are available. Probably none were taken. For the Western Section minutes are in evidence for a number of meetings down to the end of 1951. Mr. Sill stated that for the last three or four years he had not kept minutes. However, there is in evidence a good deal of correspondence, memoranda and reports dealing with meetings of both sections of the Council. Selected items from this material are cited to illustrate the practices followed by the manufacturers.

The first example begins with a letter from Canada Ingot Iron Company Limited [Armco] to Mr. S. J. Frame, dated December 31, 1945:

"Re: Metal Culvert Council Meeting - January  
4th, 1946

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As we understand it, this meeting is solely for the purpose of reaching an agreement on the question of allowing certain merchants to act as agents. We will agree that hardware merchants and builders supply dealers should be allowed to sell culverts on a maximum discount or commission of 10%.

As far as implement agents are concerned, we do not consider that these people are necessary, or that they have any connection with any of the culvert makers. Further, implement dealers to our mind are a very indefinite class of persons, and may embrace individuals who are not directly connected, with any other continuing business. Hence, if we allowed these, we would be reverting to the very condition which we set out to improve.

We also agree that since the War Time Prices & Trade Board have no objection to the restoration of the list price, that it be restored.

We also agree that contractors would be allowed a discount of 10%.

If there are no other questions to be discussed, and if these are the conditions which are demanded by two of the Companies, we do not see the need of a meeting on January 4th."

(Serial 1288)

On January 2, 1946 the Secretary circulated copies of this letter under the following covering letter:

"Metal Culvert Council  
Schedule for Ontario

Attached is copy of letter dated December 31, 1945, received from the Canada Ingot Iron Company Limited, which this year is operating under the name of Armco Drainage and Metal Products of Canada Limited.

If the said letter is accepted by the other members the set-up for Ontario would be as follows:

Southern Ontario -

To Hardware merchants and builders supply dealers,  
a maximum discount or commission off List Prices of 10%.

To Contractors a discount of 10%.

To all other purchasers (except Ontario Government) including municipalities, List Price Net.

Northern Ontario -

For Northern Ontario the set-up would be as per sheet 1A of Schedule, dated January 2, 1941, issued from this office, namely:

'NORTHERN ONTARIO

Northern Ontario, viz., that part of Province Ontario north and west of districts of Parry Sound and Nipissing.

NOTE: Under the above, the districts of Parry Sound and Nipissing are in Southern Ontario, and Manitoulin Island is in Northern Ontario.

For Northern Ontario, defined as above, Ontario Municipal list prices shall apply.

For Northern Ontario, to Dominion Government and to Contractors, 10% discount off Municipal schedule shall apply.

For Northern Ontario, Municipal list prices shall be net to municipalities.

For Northern Ontario (apart from Dominion Government and Contractors, provided for as above) a discount of 10% off Ontario Municipal schedule may be allowed only to bonafide established and recognized dealers in -

Hardware  
Builders' Supplies  
Machinery (Road or otherwise)

on condition that they maintain established resale prices. Names of dealers to whom the discount is quoted must be registered with the Secretary at time of quotation and dealer's line of business must be stated. Secretary will not divulge this list generally to members, but will keep it for check purposes in case of complaint and he will be authorized to give a yes or no answer to any member who enquires of him as to whether or not a certain firm or individual has been registered as a dealer.

Supplement to the foregoing

In any instance of more than one member requesting the registration of the name of the same dealer, it will be in order for

the Secretary to register such dealer in the name of all the members registering him; Secretary in such instance to not advise the members involved of registration by other members.'

This office will telephone members to-morrow to find out as to whether what is proposed by the Canada Ingot Iron Company is satisfactory and if such be the case a meeting called for Friday of this week can be cancelled."

(Serials 1286-7)

Apparently all companies agreed because the Secretary then sent out the following letter:

"Enclosed herewith is revised sheet 1A setting forth discounts for the Province of Ontario all parts thereof.

Westeel Products Limited in agreeing to this set-up state that they have certain old established farm implement agents to whom in the past they have been giving the discount and they reserve the right to submit to the Council for approval, if later on they should find it necessary, the name or names of such agents, for 10% discount and in each instance of any such application will abide by the decision of the Council."

(Serial 1281)

The foregoing correspondence indicates that at that time the practice in the industry involved an agreement or understanding as to dealers and contractors and the discounts at which culverts might be sold to them.

Early in the spring of 1946 the Wartime Prices and Trade Board, under whose control the industry was still operating, issued Order No. 617 effective April 1st, authorizing certain price increases, and in the East prices were increased to all classes of customers in amounts that worked out to \$12.50 per ton. For the West we find the situation described by Mr. E. R. Howes in Winnipeg to Mr. E. L. Campbell in Guelph in a letter dated April 18th, 1946. These gentlemen are both Armco officials. The copy in evidence is from the files of Armco at Edmonton. Extracts from this letter read as follows:

"When we first heard of the possible increase in culvert prices and the date of the Toronto meeting we decided that a meeting should be held by the Western Section but not until after we heard what was done in the East. Believing that Richardson should be here Sill wired him but received no reply. He then phoned him and Richardson said he would have to see if it was possible for him to come down but that he would wire

advising Sill what he was going to do. We hesitated to have a meeting until we heard definitely from Richardson, however, when we did not hear from him we decided to hold a meeting yesterday afternoon.

Jack Brown of Westeel showed up with McAuley and White in tow, Stuppard [Pedlar] was there, and Chris and I. Westeel were very definite in wanting prices increased 62 1/2¢ on all schedules including railways. I held out for a 67 1/2¢ increase on the railways. However, we could have got this situation cleared up nicely but Westeel would not accept the conditions of the first statement in Frame's set-up, namely - 'above increases are effective on all shipments commencing tomorrow April 18th'. I contended 'what is the use of increasing prices when all our booked orders, including theirs, would probably not be shipped for one, two or maybe three months'.

. . .

Another item which I had to take a chance on in trying to put through the schedule as you did in the East was the fact that the Grimshaw order is not filled and Bill might have difficulty in securing higher prices on the part yet to be shipped. You will note by the attached report from Sill that after wrangling all afternoon I suggested that we put in abeyance all discussions on increasing any prices. I think this abeyance should hold until after freeze-up this fall.

. . .

I feel as if I did the only thing possible under the circumstances and now I am very reluctant to consider any price increase until, as I said before, the last month or so of the year to apply on next year's business, depending, of course, upon conditions at that time."

(Serials 6077-8)

Mr. Howes was questioned about this letter at some length (Evidence, pp. 843-6, 883-7). He stated that the 62 1/2 cent and 67 1/2 cent increases mentioned had to do with freight rates, not prices, but it seems clear that on this occasion the Armco representative went to the meeting with certain ideas about price increases, but that he changed his mind during the course of the discussion. Further the importance attached to having Mr. Richardson in attendance, even though the meeting was eventually held without him, and the reference to "Wrangling all afternoon" do not suggest that in the West the other companies simply adopted the changes proposed by Armco.

From other evidence it seems to be established that prices to the railways in the West were increased shortly afterwards by \$12.50 per ton but prices to other customers were not increased (Serials 2664-5, also 6082 and 6088).

On May 22, 1946 Mr. E. L. Campbell wrote to certain Armco officials. One copy was sent to the company's Edmonton manager and to this copy a note was added referring to nestable pipe and reading in part as follows:

"There is no agreement with the Culvert Council on sale of Nestable Pipe, and we have assumed that we would never quote Nestable below the regular Municipal price . . . ."

(Serial 6067)

Mr. Campbell was questioned concerning this passage:

"Q. What do you mean there ?

A. I mean that we did not discuss or file with the Metal Culvert Council any prices at which we would suggest nestable culverts be sold."

(Evidence, p. 368)

A western example is found in the second page (the only one in evidence) of minutes of a meeting, probably that of November 24, 1947, reading as follows:

"RESOLVED that prices to Macdonald Bros. Sheet Metal & Roofing Co. Ltd., and Canadian Rogers Sheet Metal & Roofing Co. Ltd. be increased to:

'Municipal List less 25%, couplers included, plus Sales Tax. F.O.B. Factory. Net 30 days'.

- CARRIED -

RESOLVED that the following be added to General Information in the Western Price Schedule for Culverts with Sloped ends:

(a) The charge for sloped ends on Pipe Arches is to be for the full invert length of the pipe.

(b) On Round Culverts with 3:1 slope -

on diameters up to and including 30", charge for full invert length to be made

on 36" diameter culverts, charge for full invert length less 3 feet.

on 42" diameter culverts, charge for full invert length less 4 feet.

on 48" and 60" culverts, charge for full invert length less 5 feet.

- CARRIED -

RESOLVED that the method of arriving at prices for 21" pipe for Municipal and Government prices be the average of 18" and 24" prices.

- CARRIED -

RESOLVED that the classification, 'Galv. after Perf.' be deleted from all Western Price Schedule sheets.

- CARRIED -

The trucking situation was reviewed again, with no action taken.

The meeting adjourned at 5.30 p.m.

THOMAS SILL  
Secretary - Western Section"

(Serial 2641)

It will be observed that the meeting dealt with a specific price increase and also with additions to "General Information", decisions apparently being reached by way of motions or resolutions.

In November 1948, some of the western members concerned themselves with the question of increasing prices for 1949. Intra company correspondence of Westeel indicates that that company was opposed to any increase. Intra company correspondence of Armco indicates that Mr. E. L. Campbell believed there would have to be some moderate increase in culvert prices but he suggested it be no more than just sufficient to cover the increased cost of materials. A Western Section meeting was held on November 26th of that year, the minutes of which contain the following paragraph:

"The general situation with respect to Western Prices was reviewed at considerable length and it was decided to make no changes in the Western Price Schedule for the present, but to bring the matter up for review from time to time as

circumstances require."

(Serial 2669)

Mr. E. R. Howes (Armco) reported on this meeting by letter to Mr. E. L. Campbell on November 29th. The first paragraph reads:

"We had a meeting of the Western Culvert Council as per copy of the Minutes attached. We discussed practically all angles of the culvert business and were of the opinion that we could afford to let prices stand as they are for the time being. However, these will be reviewed during the early part of next year."

(Serial 2671)

The foregoing extracts from the minutes and correspondence relating to this meeting suggest that Armco's was not the only voice that influenced the decision.

The decision not to increase prices did not hold for long, and we have an instance of a general price increase in the West, apart from municipal prices, early in the next year. Prices to railways were increased 3 per cent on January 15th, 1949, in line with a similar increase in the East dating from the beginning of the year. Then on February 10th, 1949 a Western Section meeting was held, attended only by representatives of Armco and Westeel. The minutes read as follows:

"MINUTES OF MEETING OF WESTERN SECTION, METAL CULVERT COUNCIL, held in the Office of the Secretary, 317 Bank of Nova Scotia Building, Winnipeg, Manitoba, on Thursday, February 10, 1949 at the hour of 2:30 o'clock in the afternoon.

PRESENT:

Mr. J. K. Brown	- representing Westeel Products Limited
Mr. C. L. Fisher	- representing Armco Drainage & Metal Products of Canada Ltd.

The Secretary read the minutes of the last meeting held in November 26, 1948, which were duly adopted.

RESOLVED that the following changes be effected in the Western Price Schedule, effective February 14, 1949, and applicable to all orders accepted on or after that date:

- (a) that Provincial Government prices throughout the Schedule be increased a flat 3% in all Provinces, except that the price differential

between Ordinary Pipe and Asbestos Bonded Coated Pipe (or Paved Invert, as the case may be) be retained.

- (b) that all Dominion Government price lists be eliminated from the Schedule, and that the General Information sheet carry a notation to the effect that Dominion Government prices are Provincial Government prices for the particular Province plus Sales Tax. (Pages 4A, 6A, 8A, 10A, 24, 26, 29, 31, 34, 36, 40).
- (c) that prices to Contractors shall be Municipal Prices less 5%, and that the discount '2% 10 days' be eliminated from the terms quoted. (See Page 1 of General Information Sheet).
- (d) that all Municipal price lists in British Columbia be eliminated and that Provincial Government price lists for that Province carry a notation to the effect that Municipal prices in that Province are Provincial Government prices plus Sales Tax. (Pages 9, 38).
- (e) that prices to Contractors in British Columbia shall be Provincial Government prices plus Sales Tax less 5%.
- (f) that the notation on the General Information sheet with respect to Irrigation Districts be expanded to include Drainage Boards and Ducks Unlimited. (Thereby eliminating pages 27, 32, 37, 41).
- (g) that the charge for strutting Railway Pipe, sizes 60" and 72", be a fixed charge of \$1.50 per lineal foot of pipe.

and that the secretary be instructed to figure new price lists where necessary and have same printed and distributed to the representatives as quickly as circumstances permit.

After further discussion of a general nature the meeting adjourned.

THOMAS SILL -  
Secretary, Western Section,  
Metal Culvert Council.

Copies to:

Armco Drainage & Metal Products of Can., Ltd. ) Winnipeg  
Westeel Products, Limited )  
Richardson Road Machinery Co. Ltd., Saskatoon  
Mr. S. J. Frame, Toronto, Ont."

(Serial 4389)

Within a week after the meeting, at the request of Armco, agreed to by Mr. J. E. McAuley (Westeel), paragraph (e) of the minutes was amended to eliminate the 5 per cent discount.

An additional change was notified on February 21, 1949 by the following circular letter:

"To the Members,  
Western Section,  
Metal Culvert Council.

Dear Sirs:

Re: Metal Culvert Council,  
Prairie Farm Rehabilitation Act

Please refer to page 1, General Information, Western Price Schedule, Metal Culvert Council.

Following consultation with the Winnipeg members, it has been decided to establish Dominion Government prices for the Province of delivery for all requests for prices from the P.F.R.A. or the Water Rights Branches of the Provincial Governments, and for any direct tender called for by the P.F.R.A. Please be advised therefore that all quotations and orders involving P.F.R.A. or the Water Rights Branches of the Provincial Governments hereafter are to be based on -

Provincial Government List for the particular  
Province of delivery, plus Sales Tax.

The foregoing change goes into effect immediately and is applicable in respect of all orders received on and after February 21, 1949. The change was decided upon too late for inclusion in the most recent revision of the Western Price Schedule.

Yours faithfully

SILL, PATRICK AND COMPANY  
Secretary  
Western Section"

(Serial 6138)

While the meeting had been attended by only two persons representing only two companies, other documents indicate that the changes described above were adopted by the western members and by Pedlar.

Another example of practice in the West is found in the minutes of a Western Section meeting held in Winnipeg on November 24, 1949:

"MINUTES of MEETING of WESTERN SECTION, METAL CULVERT COUNCIL held in the Office of the Secretary, 317 Bank of Nova Scotia Building, Winnipeg, Manitoba, on Thursday, November 24th, 1949 at the hour of 2:00 o'clock in the afternoon.

PRESENT:

Mr. J. E. McAuley	(Westeel Products Limited)
Mr. C. H. Richardson	(Richardson Road Machinery Co. Ltd.)
Mr. E. Howes	(Armco Drainage & Metal Products of Canada Ltd.)
Mr. M. A. Buell	(Roofers Supply Co. Ltd.)

The Secretary read the minutes of the last meeting held February 10, 1949, which were duly adopted.

RESOLVED that strutting charges on pipe to all markets be as follows:

Sizes 60" & 72"	- \$1.50 per lineal foot
" 84" & 96"	- \$2.00 " " "

The basis of prices in the Thunder Bay-Fort Frances area was discussed at considerable length, particularly the practice of equalizing freight on North Bay:

RESOLVED that the Western Secretary write the Eastern Secretary, Mr. S. J. Frame, requesting the establishment of an overall price list for the Thunder Bay-Fort Frances District.

RESOLVED that the Sundry Rules and Information applicable to the Western Section be revised so as to make prices on all sewer and airport jobs in all municipalities subject to registration.

RESOLVED that the Western Section recommend to the Annual Meeting that a system of registering prices on both sewer and airport jobs be made applicable in respect of all such jobs in the Thunder Bay-Fort Frances District.

A long drawn out discussion then ensued on Western prices.

RESOLVED that prices to Steam Railways and Municipalities in all Western Provinces be increased a flat 2% all round, the price changes to be effective immediately and applicable to all orders booked on and after November 25th, 1949.

RESOLVED that arrangements be made for one member of the Western Section to attend the Annual Meeting in Toronto each year as a representative of the Western Section; that Mr. J. E. McAuley represent the West this year, and thereafter western representation be rotate[d] among the several Western members.

In the course of further general discussion the installation of oval or arch culverts, truck deliveries direct to installation location, and other matters, were dealt with at varying length.

The Meeting then adjourned.

THOMAS SILL -  
Secretary, Western Section,  
Metal Culvert Council.

Copies to:

Armco Drainage & Metal Products of Canada Ltd.) Winnipeg,  
Westeel Products Limited ) Man.  
Richardson Road Machinery Co. Ltd., Saskatoon, Sask.  
Roofers Supply Co. Ltd., Toronto, Ont.  
Mr. S. J. Frame, Toronto, Ont."

(Serial 128)

Mr. M. A. Buell (Rosco) was questioned concerning this meeting:

"Q. My question is this From your knowledge of what occurred at meetings of the Western Section of the Metal Culvert Council is the document 128 a fair description of the typical procedure at such meetings? Perhaps, is the discussion as recorded on 128 typical of what occurred at such meetings?

A. I think I must answer yes to that. I think this was the first meeting of the Western Section of the Metal Culvert Council that I attended.

Q. Perhaps on that count it might be fresher in your memory, would it?

A. That was in 1949.

COMMISSIONER ROBERGE: Was it typical of discussions and decisions made at meetings at which you were present?

. . .

BY MR. MacLEOD:

Q. Do we have your answer on the record to that?

A. My answer is that information that is contained therein is relatively typical of the discussions that took place at such meetings."

(Evidence, pp. 611-2)

Mr. T. Sill, the Western Secretary, said that he could not recall any lengthy discussion at any time on western prices.

Mr. C. H. Richardson (Richardson) recalled the meeting. He did not recall a discussion on western prices as being of any great length.

Evidence concerning the only meeting in the East of which minutes are available has some significance. The copy of the minutes in evidence came from the files of Rosco and is unsigned. It reads as follows:

"Minutes of Annual Meeting of Metal Culvert Council held at the King Edward Hotel, Toronto, on Tuesday, December 6th, 1949, at 1.45 P.M.

Present

Representing

Mr. E.S. Sargeant )	
and )	Messrs. Westeel Products Limited.
" G.W. Sunderland)	
" E.L. Campbell )	
and )	" Armco Drainage & Metal Products
" H.M. Lloyd )	of Canada Ltd.,
" R. Calhoun )	
and )	" The Roofers Supply Company Limited,
" M.A. Buell )	
" T.A. Parker	" Canada Culvert Company Limited,
" F.C.M. Forster	" Corrugated Pipe Company,

Mr. Raoul Lassonde	Messrs. Quebec Corporation Limited,
" J.H. Thomson	" Robertson, Irwin Limited.
" J.E. McAuley	" Western Section,

CHAIRMAN RESOLVED

That the Secretary, Mr. S. J. Frame, is hereby appointed Chairman.

Mr. Frame here took the Chair.

- - - - -

SCHEDULE

Mr. E. L. Campbell and Mr. George W. Sunderland, in behalf of the committee consisting of themselves and Mr. M. A. Buell, submitted to the meeting their recommendations as to the schedule and the conclusions of the meeting are set forth on supplementary sheets attached hereto.

- - - - -

NOTE

The schedule sheets handed by the Committee to those present at the meeting, do not represent definite new prices but are simply illustrative of the operation of the principles recommended by the Committee. See on a further sheet of these minutes, directions given by this meeting to the Committee.

ROOFERS' SUPPLY COMPANY LIMITED.

PROPORTION OF EXPENSES OF WESTERN SECTION

Whereas The Roofers' Supply Company Limited, under date May 31, 1949 were admitted into the Western Section RESOLVED that from May 31, 1949 to December 31, 1949, The Roofers' Supply Company Limited be assessed pro rata for the said broken period at the same rate as the other members of the Western Section, namely \$127.50 per year plus proportion of disbursements of Western Section in the said broken period:

FEES OF THE SECRETARY  
AND THE WESTERN SECRETARY

RESOLVED

That effective January 1, 1950, the yearly fees of the Secretary and the Western Secretary respectively, be as follows:

Secretary	\$1000.
Western Secretary	450."

(Serials 457-8)

These were supplemented by the following further documents:

"December 6th, 1949.

Metal Culvert Council - EASTERN SECTION

Changes adopted at this meeting

DOMINION GOVERNMENT

Quote Provincial Government list for particular province, plus Sales Tax.

SHEET 3, (ONTARIO), DATED MAY 26, 1949 - MUNICIPAL -  
ONTARIO, AND SIMILAR SHEETS FOR OTHER PROVINCES

The following clause:

'Municipal schedule applies to all purchasers except steam railways and Provincial Governments'

is hereby changed to read:

'Municipal schedule applies to all purchasers except steam railways, Provincial Governments and Dominion Government.'

The following clause on the said page:

'On sales to Dominion Government there is used the MUNICIPAL schedule applying to province in which the metal culverts are required'.

IS HEREBY CANCELLED:

The above changes apply also to sheet 4 (province of Quebec) and sheet 5 (Maritime Provinces)

#### DISCOUNT OFF MUNICIPAL SCHEDULES

The present clauses on sheet 3, (Ontario,) sheet 4, (Province of Quebec) and sheet 5 (Maritime Provinces), pertaining to 10% discount off Municipal schedule, are hereby cancelled and superseded by the following wording:

'Off Municipal schedule 10% discount (not commission) applies to following tradesmen who purchase for resale:

Hardware Merchants  
Builders' Supply Dealers  
Road Contractors  
General Contractors

#### THUNDER BAY DISTRICT AND WEST THEREOF

Municipal prices in Thunder Bay district and West thereof will be the same as new Manitoba Municipal prices, delivered .

Ontario Government prices apply for all of Ontario.

#### NEWFOUNDLAND

Prices for Newfoundland to be F. O. B. St. John's and Pointe au[x] Basques.

#### PERFORATED PIPE

If perforated after galvanizing - 5% extra.  
If perforated before galvanizing - 10% extra.

#### AIRPORT AND SEWER JOBS

The references to airport and sewer jobs in Sundry Rules sheets 9, 10 and 11 are hereby cancelled.

CANCELLATION OF CERTAIN SIZES IN SCHEDULE - The following sizes are hereby cancelled:

<u>Size</u> <u>Inches</u>	<u>Gauge</u>
8	14
10	14
12	12
15	12
18	10
21	10
36	16
42	16
48	14
54	14
84	12
96	12

Directions to  
Committee

Whereas this meeting accepts in principle the recommendations of the Committee, the Committee is hereby directed:

To develop and complete its recommendations whereby new schedules can be issued as close to January 1st, 1950, as is possible;

To make recommendations as to specifications of culverts;

To make recommendations as to airport and sewer jobs."

(Serials 459-60)

The officials of several companies were examined concerning this meeting and matters referred to in the minutes. In the evidence of Mr. F. C. M. Forster (Corrugated Pipe) the following appears:

"Q. I think you have told me already that you have attended meetings?

A. That is right.

Q. Have you attended meetings at which a committee has reported on suggested prices?

A. Yes.

Q. Do you recall an occasion on which Mr. E.L. Campbell, Mr. George W. Sunderland and Mr. M.A. Buell constituted such a committee?

- A. Yes, I imagine I have. I do not remember those particular names. I see it written on there, so it must have been.
- Q. Apart from the document, do you remember occasions on which representatives of various manufacturers acted as a committee?
- A. Yes, I do.
- Q. What did that committee do?
- A. They would make various recommendations regarding prices.
- . . .
- Q. What would be a typical recommendation?
- A. Well, along this line, that they had studied the changes in possibly the base price of steel or the labour situation and they would recommend an increase or decrease in the price of the culverts that should be followed.
- Q. What would happen then?
- A. Well, there would be a little discussion on it and possibly it would be the recommendation would be accepted, possibly it would not.
- Q. Can you recall an occasion on which the recommendation of such a committee was not accepted?
- A. No, I cannot definitely recall. I can recall certainly a great deal of discussion, and I think that possibly some of the recommendations were not followed.
- Q. Can you recall any occasion on which a recommendation was varied following discussions?
- A. Was varied?
- Q. Yes.
- A. You mean varied from what they recommended?
- Q. From the original recommendation?
- A. Oh, yes.

- Q. What would be the end result of this discussion?  
Would action of some kind be taken?
- A. If -- whatever the result of the discussion would be -- yes,  
there would be action taken. If it was a change --
- Q. What action would be taken?
- A. -- in price, if the price was changed, then there would be  
a new price schedule sent out.

. . .

- Q. What other matters besides prices were discussed at  
meetings of the Metal Culvert Council which you attended?
- A. It all had an indirect bearing on prices, such as freight,  
expenses, agents."

(Evidence, pp. 65-7)

From the evidence of Mr. E. L. Campbell (Armco):

- "Q. The minutes or purported minutes refer to you acting  
as a committee with Mr. Buell and Mr. Sunderland; do  
you recall having so acted?
- A. I recall that on matters of recommendations to the group  
that other companies left it pretty much to the three of us  
to bring in recommendations in connection with any  
suggested prices.
- Q. Do you specifically recall bringing in the recommendations  
that are set out in the last two sheets which are referred to  
in the body as being schedule sheets -- these are copies,  
Mr. Chairman.
- A. Your question is, do I recall what?
- Q. Do you recall a committee of yourself, Mr. Sunderland and  
Mr. Buell bringing in recommendations as listed in the  
last two sheets, that would be 459 and 460?
- A. I would say that these remind me that we had a good deal  
to do with preparing those recommendations.
- Q. Did I understand you to say that it was the general practice  
for you to be associated with Mr. Buell and Mr. Sunderland  
in preparing such recommendations?

- A. I said that the other companies had indicated confidence in myself and these other two companies mentioned in bringing in our suggestions on any suggested price list."

(Evidence, pp. 395-6)

Mr. Buell (Rosco) gave the following evidence:

- "Q. Do you recall acting on a committee with Mr. Sunderland and Mr. Campbell?
- A. Yes, sir.
- Q. To bring in recommendations?
- A. Yes, sir.
- Q. Will you just explain what the work of that committee was, Mr. Buell?
- A. The committee was simply a working committee to bring in various recommendations for various merchandizing plans and to deal with -- actually Sunderland and I were on the committee to deal with Armco, to represent as it were the rest of the group rather than having a very large number of people talking back and forth. Regardless of the fact that the committee existed Armco was the dominating factor in this committee.
- Q. The specific reference here is to December, 1949. Did you ever prior to 1949 or subsequent to 1949 serve on any similar committee?
- A. Not to my knowledge.
- Q. Can you tell us if the changes set out in 459 and 460, the first sheet being headed 'Changes Adopted at this Meeting' are an accurate summary of the recommendations of your committee or of the changes made at that time?
- A. I think the best answer I can give you is that it is a reasonable assumption.
- Q. You do not recall them specifically?
- A. No, not specifically."

(Evidence, pp. 614-5)

Mr. Sunderland (Westeel) was asked if he recalled being on a committee with Mr. Campbell and Mr. Buell:

"A. Yes.

Q. Do the minutes on the sheets which I have shown you accurately report the work done by that committee?

A. They do not convey the most important feature of it.

Q. Will you just tell us --

A. That two members of the committee had no vote at all.

. . .

Q. Will you explain that?

A. Armco brought in price schedules, and while we would discuss various angles, those price schedules still ruled.

Q. What was the point of the discussion or having a committee at all, Mr. Sunderland?

. . .

THE WITNESS: I have previously said that there were discussions on points which other members of the committee did not like, and on very minor points there would be modifications, but generally Armco prices ruled.

. . .

Q. Was it customary to have a committee of this type each time there was a price change?

A. No.

Q. What would be the exceptions?

A. Perhaps I should qualify it this way, that there was no official appointment of a committee. It seemed to be taken for granted that we three would discuss things and act as liaison with the others.

Q. Having discussed them what would you then do in respect to the general meeting?

- A. Frankly, Mr. Campbell would come in and do all the talking, 99 per cent of it."

(Evidence, pp. 704-5)

Despite some of the statements of Mr. Buell and Mr. Sunderland the evidence relating to this meeting points strongly to the conclusion that uniform prices were arrived at by discussion and agreement.

Coming down to the period following the closing of Mr. Frame's office in Toronto the following example of a western meeting which dealt with prices is cited. The meeting was held in the office of Sill, Patrick and Company in Winnipeg on March 23, 1953. The written evidence is found chiefly in a report drawn up by Mr. M. A. Buell (Rosco) of a western trip he had made between March 22 and April 3 of that year. Mr. Buell stated that it was an accurate report to the best of his knowledge. The portion describing the meeting of March 23rd is as follows:

"Meeting of the culvert manufacturers - Sill Patrick's  
office - 2:30

Present: Ed Howes of Armco: McCaulay [McAuley] of Westeel; Banting of Richardson Road Machinery, Saskatoon: Bailey [Bayley] of Pedlar, Winnipeg.

McCaulay, as usual, started out with his obstructionist tactics and I found it necessary to tell him so.

Finally, we arrived at a formula for price increase, as follows:

1% on highway and railways, and  
1 1/2% on municipal prices,

to be effective May 1st, 1953. The increases dealt with at this meeting apply only to the Prairie Provinces - Manitoba, Saskatchewan and Alberta. British Columbia prices were dealt with at a later meeting.

Much discussion was indulged in regarding Alberta and B.C., but it was decided to hold over any action on these two points until zone meetings could be held."

(Serials 544-5)

In giving evidence Mr. Buell stated that the reference to obstructionist tactics had no bearing on what the Director was trying to establish. His evidence continued:

"Q. Continuing the next sentence there, you say:

'Finally we arrived at a formula for price increases, as follows:'

Does that indicate that there was a discussion before the formula was established?

A. Yes. Inasmuch as there had been at that time a price increase in the cost of raw material it was necessary to establish some basis for increasing prices in Western Canada, or in the prairie provinces, I should say."

(Evidence, p. 636)

The meeting of December 21, 1953, referred to earlier in this chapter, is an example of an eastern meeting which dealt with prices. Representatives of five companies were in attendance, namely, Armco, Westeel, Rosco, Robertson-Irwin and Pedlar (Serials 2801-2, 2808-9, 2811-2). Pricing changes set out in Serials 2811-2 were adopted by the companies.

(ii) Attitude of Companies to Sales Below List Prices

It has already been pointed out that there is no evidence that the provision for investigation and compensation contained in the old document Exhibit T-2 (dated 1931) was ever put to use. On one occasion in 1950 Pedlar did ask Mr. Frame to investigate prices that had been quoted to the Newfoundland Government. Subsequently, Pedlar (not then a member of the Council) received a copy of a letter written by another company outlining the basis of its quotations. Whether Mr. Frame had anything to do with this document being forwarded to Pedlar is not established. It was not addressed to either Pedlar or Mr. Frame. There is likewise no evidence of any arrangement in later years for disciplinary action for price cutting, nor of any disciplinary action ever being taken. There is evidence, however, which indicates pretty clearly that the companies were expected to adhere to their published prices, and that departures therefrom were not entirely disregarded. In several instances on record sales or offers to sell by one manufacturer at prices actually or supposedly below the appropriate list price were inquired into with some care by other manufacturers. In some cases efforts were made, in at least one case with success, to persuade the company to change the price it had quoted so as to conform with the current list price. Sometimes the low price turned out, on inquiry, to be unintentional and to have arisen from mistake or from misunderstanding of the "rules" applicable to the particular case. The companies knew they would be criticized by competitors if they sold below the current list price and always appeared anxious to avoid such criticism by means of an acceptable explanation.

In correspondence referring to prices charged or quoted by other companies the following expressions were each used on at least one occasion: "chiselling of prices", "unethical price cutting", "we doubt the legitimacy of their quote". These expressions standing by themselves might not be significant, but read together with the other evidence they lend some support to the view that the companies felt departures from published prices were to some extent unfair or improper.

Sales to dealers for resale to the consumer, frequently a municipality, have sometimes led to charges of price cutting. The price to such dealers allows them a discount from municipal prices, which discount is now 5 per cent but was 10 per cent until recent years. It was indicated that in some cases a dealer might reduce the price to the municipality, in effect cutting his own profit in order to make a sale. Mr. Forster (Corrugated Pipe) mentioned one instance of this kind, a sale by himself to a dealer, for the city of Sarnia. Apparently the manufacturers regarded this situation with some concern. In a letter from Mr. Frame to Council members dated January 2, 1946, already referred to, we find the following paragraphs containing proposals submitted to them for approval:

" . . .

'For Northern Ontario (apart from Dominion Government and Contractors, provided for as above) a discount of 10% off Ontario Municipal schedule may be allowed only to bonafide established and recognized dealers in -

Hardware  
Builders' Supplies  
Machinery (Road or otherwise)

on condition that they maintain established resale prices. Names of dealers to whom the discount is quoted must be registered with the Secretary at time of quotation and dealer's line of business must be stated. Secretary will not divulge this list generally to members, but will keep it for check purposes in case of complaint and he will be authorized to give a yes or no answer to any member who enquires of him as to whether or not a certain firm or individual has been registered as a dealer.

#### Supplement to the foregoing

In any instance of more than one member requesting the registration of the name of the same dealer, it will be in order for the Secretary to register such dealer in the name of all the members registering him; Secretary in such instance to not advise the members involved of registration by other members.'

. . . "

These proposals were apparently accepted.

As sales to dealers necessarily gave the manufacturers a smaller gross return, they have naturally preferred to sell direct to the consumer, but the foregoing extract from Mr. Frame's letter indicates, by its insistence on dealers maintaining established resale prices, that the manufacturers attach some importance to and have sought to assure maintenance of prices. The requirement that dealers in Northern Ontario be registered with the Secretary must have been intended to afford some degree of control over their activities. It should be noted that while some members of the Council supplied the Secretary with a list of their dealers, others did not, and this provision seems never to have been of much effect.

In the Western Section a similar step was taken, which appears to have been intended to provide knowledge of the prices tendered by members on airport and sewer jobs. Partly to meet competition from concrete pipe and partly because such jobs required a fairly large volume of pipe, the metal culvert manufacturers have not objected to lower prices being quoted on pipe to be used for these purposes. In some documents prices on pipe for these purposes have been described as "free". In a letter from Mr. S. J. Framé to Sill, Patrick and Company dated March 11, 1950 it is stated that an understanding had been adopted that year, shown in "Sundry Information", that the minimum price for culverts for sewers be 10 per cent discount off the municipal list, with a further 5 per cent allowed where the sale was made through certain specified classes of dealers and contractors (Serial 4438).

In the fall of the previous year the Western Section, at a meeting on November 24th passed the following two resolutions:

"RESOLVED that the Sundry Rules and Information applicable to the Western Section be revised so as to make prices on all sewer and airport jobs in all municipalities subject to registration.

RESOLVED that the Western Section recommend to the Annual Meeting that a system of registering prices on both sewer and airport jobs be made applicable in respect of all such jobs in the Thunder Bay-Fort Frances District."

(Serial 128)

In giving evidence Mr. C. H. Richardson (Richardson) stated that he recalled the discussion at the meeting and that he thought his firm had registered one or two jobs with Mr. Sill's office (Evidence, p. 1082).

It should be pointed out however, that both Mr. Howes (Armco) and Mr. Sill (the Western Secretary) denied that any registration system was followed and Mr. F. C. Dempsey (Pounder) stated that he did not know of such a system. A later document (Serial 3328) found in the files of Pounder, deals with this matter of registering bids. It is an unsigned memorandum dated May 2, 1953 and reads as follows:

"MEMORANDUM RE AIRPORT AND SEWER JOBS

We wish to refresh your memory on the following procedure:

Sewer Jobs for Urban Municipalities

On sewer jobs (storm, sanitary, or storm and sanitary combined) for Urban Municipalities, prices are OPEN.

Sewer Jobs for Suburban or Rural Municipalities

On sewer jobs (storm, sanitary, or storm and sanitary combined) for Suburban or Rural Municipalities, the following procedure shall apply -

Any member desiring to quote special prices shall file same with Secretary (in the case of the Western Section, with the Secretary's representative at Winnipeg) prior to quoting and enquire at the same time if any other member has filed a price or prices for the same job.

It will be in order to register the full schedule price on the job involved.

Such filed price shall indicate clearly the location of the job.

The first member to so file a price for a specific job establishes a minimum unless a change is made and agreed to by all those who have advised the Secretary that they are quoting on the job.

In operating the above rules the minimum price on ordinary pipe shall be determined by the special price, if any, quoted on paved pipe, that is to say -

(a) If first price filed is on ordinary pipe and later on, on paved pipe, a greater discount off the paved pipe schedule is proposed than the special discount filed on ordinary pipe, the first price on ordinary pipe may be amended by quoting the special discount applying on paved pipe.

(b) If first price filed is on ordinary pipe and later on a price is filed on paved pipe, which is subject to a smaller discount off the paved pipe schedule, than that applying to the ordinary pipe, if the paved pipe maker, in the face of the greater discount filed on ordinary pipe files a smaller discount on paved pipe, it will not be necessary for the maker filing the price on ordinary pipe to revise his price to conform to the smaller discount filed on paved pipe."

(Serial 3328)

The document had been received by Mr. M. A. Buell (Rosco) from Sill, Patrick and Company and forwarded by him to the associated Rosco companies. Mr. Buell stated that he had never filed a price and knew nothing about filing prices, but that he would not have forwarded this memorandum to his associated companies if he had not expected them to follow its provisions (Evidence, p. 646).

Quite obviously the procedure outlined in the memorandum was intended to exercise some control over bidding prices for sewer contracts for suburban and rural municipalities. In practice it may be that both the earlier resolutions and this newer procedure proved to be pretty much a dead letter.

#### (iii) Prices Quoted on Tenders

The evidence makes it clear that the manufacturers wished tenders to be made on the basis of their uniform published prices, with the exceptions applying at the time in respect of airport and sewer contracts. They made some efforts to attain their wish. On some occasions when a manufacturer had put in a lower bid he was approached by one or more of the others for an explanation. This approach may not often have succeeded in obtaining a revised tender, but the aim must have been to keep the companies' bids "in line" with each other. Discussions occurred between companies as to the prices to be tendered on particular contracts. There are references to the "price agreed upon" for tendering. In two cases on record in which identical bids were submitted, the customer threw out all bids and called for new tenders. In one of these cases the agent of one of the companies put in a new bid at a lower price though the company had not intended him to do so, and secured the contract. The company's decision not to tender again had not reached him until after the new tender had been made. In the other case new tenders were made, some by firms outside Canada, and a United States firm proved to be the lowest bidder, thus obtaining the contract.

#### (iv) Extra Charges for Coating and Arching in British Columbia

For many years there were only two culvert manufacturers making culverts in British Columbia, viz., Armco and Westeel. Pedlar also sold culverts in that province, operating through a distributor. In 1952 Pedlar opened a branch plant in British Columbia. In 1953 Rosco

(B.C.) was incorporated and set up a plant. Apparently neither Rosco (B.C.) nor Westeel have complete manufacturing facilities, for they have made arrangements under which Armco coats pipe for them.

The evidence does not make clear why the extra charges for coating and arching became a matter of much discussion in relation to British Columbia, no difficulties of this kind apparently arising in respect of other provinces, but such is the case.

The year in which coating and arching extras in British Columbia came to the fore was 1950, though some correspondence occurred in 1948 and 1949 and further correspondence continued in 1952 and 1953.

A letter from Mr. E. C. Elder (Armco, Vancouver) to Mr. E. R. Howes (Armco, Winnipeg) dated August 31, 1948, states that on advice from Mr. Howes the Vancouver office had been adding the same arching cost to the Vancouver price for pipe as was being included in Winnipeg in the Winnipeg price for pipe. At that time Armco's Vancouver plant was not producing pipe arch but was obtaining it from Winnipeg (Serial 4384).

In the following year in a letter to Messrs. E. R. Howes and C. L. Fisher, with copy to Mr. E. L. Campbell, dated February 25th, Mr. Elder proposed that a differential be established for asphalt coating of asbestos bonded coated and asbestos bonded paved culverts, which differential would be added to the company's standard galvanized pipe prices regardless of gauge.

In 1950 there was a considerable volume of correspondence, chiefly between officials of Armco, relating to coating and arching costs. From numerous references to discussions in Vancouver between Mr. Elder (Armco) and Mr. Styan (Westeel) and in Winnipeg between Mr. Howes (Armco) and Mr. McAuley (Westeel) it is quite clear that changes in coating and arching costs were not regarded as a matter for unilateral action by one company. Mr. Howes stated in evidence that Mr. Elder, Armco's British Columbia manager, had a much better knowledge of conditions in British Columbia than he had and that he began setting up prices for himself. However, Mr. Howes was kept fully advised of what was being done and of all price changes proposed. Further, when new price sheets or change sheets for British Columbia were issued by the Western Secretary the instructions were given to him by Mr. Howes at Mr. Elder's request.

Early in 1950 there was an argument between Armco and Westeel extending over some weeks concerning western prices for coated and coated and paved pipe. Mr. McAuley of Westeel asserted that the price for galvanized coated or coated and paved pipe should be half way between the price for plain galvanized pipe and that for asbestos bonded coated or coated and paved pipe. Armco insisted that the price of coated or coated

and paved pipe should be the same, regardless of the material of which the pipe was made. In the East it seems that Armco's position had been accepted by the elimination of all references to asbestos bonded in the price sheets. In the West, including British Columbia, it would appear that Armco's contention likewise prevailed in 1950.

On April 22, 1950 Mr. Elder wrote Mr. Howes, his letter reading, in part, as follows:

"Was very interested in your letter of April 20 regarding your conversations with McAuley on coating prices. You are really getting down to brass tacks now. This is what I have been wanting for the last six months and you can tell McAuley that unless he sticks to the schedules that we have agreed for coated pipe in B.C. namely; following the Eastern schedule on fully asphalt coated and Paved Invert fully coated, that we intend to establish intermediate lists here in B.C. for single dip asphalt coating as competitive to their Bitumastic or painted coating.

Yesterday we held a meeting with Mr. Styan of Westeel, Mr. Blott of Willard Equipment (for Pedlar) and myself and agreed we would file with the Western Council prices for B.C. as mentioned above, leaving out entirely the paved invert. It was further agreed the price to the Government would be effective as from April 20, on both fully coated and coated and paved. The 15% increase over the Eastern schedule has been calculated to the nearest cent with anything from one-half cent increased to one cent.

We are preparing separate price sheets on each different pipe or arch to send to Winnipeg to be incorporated in the Western schedules for the Government and will follow immediately with the railway list as soon as I hear from you regarding arching costs on the larger pipe arches mentioned in my letter of two days ago.

Regarding Mr. McAuley's reaction on the P.G.E. bids, Styan has faithfully given me his word that he will only quote on fully asphalt coated pipe at the new price schedule and I know he had been talking to McAuley shortly before our meeting yesterday so I am inclined to think the Engineers for the P.G.E. do not like their Bitumastic paint coating any better than Prov. Government men and this is their reason for being so anxious for us to coat their pipe here at Vancouver. However, I know that Styan will still put in a bid on the half way point between galvanized and A.B.C. if McAuley instructs him to do so, as this same thing happened last year, so McAuley needs to be put on the spot even more over this half way point which we have never agreed to, but he told Styan last month that there was a ruling at one time in the Culvert Council permitting this so make him dig it up and produce the evidence."

(Serials 4459-60)

It will be noted that a representative of Pedlar is reported to have been present at the meeting referred to in Mr. Elder's letter.

On April 25, 1950 Mr. Elder wrote Mr. Styan as follows:

"Enclosed find duplicate copies on Corrugated Metal Culverts and Corrugated Pipe Arches, fully asphalt coated and fully asphalt coated & paved for the B. C. Government and steam railroads. The prices on pipe arches, fully asphalt coated and fully asphalt coated & paved for the steam railroads will be prepared and mailed in the near future.

These prices, as you are aware, were made up by adding the coating differentials to the prices of Galvanized Corrugated metal pipe to the various markets, as was agreed upon at our joint meeting in the Westeel office on April 21st, 1950.

We have made all prices for coated pipe to the B. C. Government effective as from April 20th, 1950 and by copy of this letter to our company representative at Winnipeg are requesting that these prices be entered in the Western section in the schedule of metal culvert prices.

It was my understanding at our recent meeting that we would all agree to file on the basis of requesting only the three following price alternatives, applicable to the various markets in B.C., namely Provincial Government and Steam Railroads as follows:

- |                                      |                       |             |
|--------------------------------------|-----------------------|-------------|
| 1. Standard Galvanized               | Corrugated Metal Pipe | Pipe Arches |
| 2. Fully Asphalt Coated              | "                     | "           |
| 3. Paved Invert-fully asphalt coated | "                     | "           |

If any errors or omissions [ sic ] are noted when checking this list, or as to my understanding referred to above, we will be pleased to receive your correction or comments."

(Serials 4461-2)

On April 26, 1950 Mr. Howes wrote Mr. Elder, the first two paragraphs of his letter reading as follows:

"Re Coating Differentials.

Phoned McAuley and he was agreeable to the prices you, Styan & Blott have set up.

There is only one price on coated pipe regardless of what metal there is underneath. As you know Mac wanted a price set up

for standard steel culvert pipe coated and another for asbestos coated & Dipped pipe. I think the same question came up in eastern Canada but you will see the eastern schedule shows coated pipe only and we should adhere to the same setup."

(Serial 4463)

Then on May 1, 1950, Mr. Sill, the Western Secretary, wrote to Mr. M. A. Buell (Rosco):

"Re: Western Price Schedule  
Metal Culverts

Please be good enough to delete from the Index and Pages 20 and 29, both inclusive, of the Western Price Schedule any reference to the two words 'Asbestos Bonded'. These particular pages of the Schedule are intended to apply to straight galvanized, corrugated pipe and coatings of all kinds.

Circumstances which required the use of these words in the past have changed to such an extent that their present use is rather misleading. Henceforth the price lists mentioned above are to be interpreted as applying to all types of coated pipe. This practice will bring us into line with what was adopted in the Eastern schedule."

(Serial 463)

From the price sheets found on the premises of the various western manufacturers it appears that after May 1, 1950 there was, until 1955, no mention of "Asbestos Bonded" in the sheets issued by the Western Secretary nor in the sheets run off by the companies for their own use from those supplied them by the Western Secretary. At the end of 1954 separate prices for asbestos bonded again appeared, somewhat higher than the prices for galvanized coated or galvanized coated and paved.

Further correspondence between Armco officials occurred in 1950, also in 1951 and 1952 and early in 1953. In 1952 Mr. Elder wanted arching and coating prices set up 10 per cent higher for British Columbia than were shown in the Western Schedule for the Prairie Provinces. These extras in British Columbia had been set more or less independently of other western provinces since 1950, and Mr. Elder stated that he and Mr. Styan (Westeel) felt they should tie their coating and arching extras to the Prairie extras so that they would have a recognized base to work from. The 10 per cent over Prairie levels was to take care of higher labour costs in British Columbia. Mr. Howes and eastern officials of Armco did not agree with Mr. Elder's proposal, on the ground that the coating and arching extras in the existing price schedule were already higher than necessary. Mr. Elder still

asked Mr. Howes to have Mr. Sill multigraph his proposed pipe arch prices and include them in the western schedule. On April 17, 1952 Mr. Howes replied, in part as follows:

"Going down and having Mr. Sill multigraph some sheets for inclusion in the Western Schedule is not as easy as it would appear. All other members, of course, have to be consulted and I hesitate to take this matter up as some time ago I had quite a battle to get agreement on a reduction in the arching charge in the provinces of Alberta and Saskatchewan. This I succeeded in doing and I think it will result in our selling more pipe arches. I can't go back now and make out a case for an increase in the price of pipe arches in the province of B.C."

(Serial 4524)

Questioned concerning this paragraph Mr. Howes remembered that he had thought arching prices were too high, that he had had quite a discussion on the subject with Armco's branch managers and, he imagined, discussions also with the company's competitors, but he did not recall any "battle".

(v) Newfoundland Prices

This inquiry has been concerned with the metal culvert industry in Newfoundland only since that province entered Confederation in 1949. Prior to that time little business was done in Newfoundland by Canadian culvert manufacturers. Further, before 1955 there was no metal culvert manufacturing plant in Newfoundland. In that year Armco established a plant at Bishop's Falls, a fact which has improved Armco's position with respect to government contracts, as the Newfoundland government seems to have been inclined to favour local business concerns.

When, following Newfoundland becoming a province of Canada, Canadian culvert manufacturers began to seek business there, for the most part they employed distributors or dealers to whom a discount was allowed on business obtained. Armco had a distributor in St. John's, Newfoundland, but also sent its own sales engineers to Newfoundland to deal with government engineers, and put in tenders direct to the government.

The evidence seems clear that the Newfoundland distributors and dealers, who handled various goods other than culverts and related products, had been accustomed to act in a competitive fashion pricewise, when quoting prices or submitting tenders. This situation and the attitude of Armco toward it are set out in a letter dated June 16, 1950, from Mr. E. L. Campbell to Mr. J.K. Young, both of Armco, reading in part as follows:

"The significant thing about all this is that Tucker informs me that is the way all business is done in Newfoundland. In comparison with the condition in most lines of business across Canada where prices are pretty well stabilized for various commodities, a condition which the Newfoundlanders are evidently not aware of yet, it has been a case of cut-throat competition down there, each firm trying to get a fair slant on how much the other fellow cuts and then he cuts a little bit more at the last moment. When I informed Tucker that there are established prices for culvert pipe delivered in Newfoundland, he immediately asked 'Then how did you expect to get the business?' without being the least bit naive. I told him through the service we extend and delivery.

This is rather a bad turn of affairs, since it appears the business down there is done more like in the U.S., and the culvert companies in Canada have been inexperienced in doing business on such a cut price basis. It may handicap us more than our competitors, because they do not know their costs as accurately as we. Their accounting is based on 'prime cost', that is just material and labour, and they do not pro-rate all their factory overhead expense between the various products made in their plants.

I am therefore inclined to think we should continue an effort to have prices in Newfoundland kept stabilized."

(Serial 2711)

There seems to be no doubt that Mr. Campbell's desire to have prices stabilized was supported by other manufacturers. Thus on June 16, 1950 Mr. T. J. Kellington of Pedlar, which since 1948 had not been a member of the Metal Culvert Council, wrote the company's Montreal office, re Newfoundland Government culverts, as follows:

"Following receipt of your letter of June 2nd, we asked Mr. Frame to investigate the prices quoted to the above and to determine whether or not Provincial Government prices in accordance with our list, had been quoted.

We are today in receipt of a copy of letter from one of the Company's [sic] concerned and attach hereto a copy of this letter.

It is rather difficult to understand how our representatives can account for the direct statement which they make concerning 1 1/2% discount, but it would appear that if Westeel Products secured a portion of this order on the prices quoted in this letter, there would be no basis to assume that the other manufacturers quoted a discount."

(Serial 7117)

From Pedlar correspondence earlier in the year it is clear that Pedlar had expected that prices to the Newfoundland government would be maintained by the various companies.

Further evidence concerning the attitude of other companies is found in an internal company letter from Mr. E. L. Campbell of Armco to Mr. J. K. Young at Saint John, N.B. dated January 22, 1951 and headed - "Newfoundland":

"Prior to the annual meeting at Toronto of all Members of the Council, I had a private session with the Managers of Westeel and Roofers Supply. At that time, I frankly stated that our information was that their tenders on the corrugated pipe and Pipe Arches last spring was considerably below ours, evidently as much as 10%. By prior telephone arrangements, they had brought some of the data with them, at least Roofers Supply, although Westeel said their tender was made out and handled from their Montreal office so the data was not available at Toronto.

They both seemed surprised and apparently sincere in their statements that they had thought they were quoting on the correct basis, and some possible explanation of the difference in the case of Roofers became evident when I learned that they had quoted prices alternate to the 72" span Pipe Arch, on a structure about 84" span but without a full metal bottom.

A backcheck with Roofers, showed on several items of direct comparison that they had used the same prices f.o.b. Port-Aux-Basques and St. John's as we had. But where prices were requested in the interior, I think Westeel figured the freight right through, which would make them lower delivered than ours.

You will realize that I could not go too far, but I think we did accomplish the purpose of getting them on their toes against any unethical price cutting, so I feel we should proceed on any more business down there on the same basis as anywhere else in Canada, of assuming that the scheduled prices will be maintained.

We then agreed that the prices for this past year in the Maritimes and Newfoundland had been entirely too low, because of the extremely high freight rate. So for Newfoundland, new prices for 1951 were calculated as those f.o.b. Toronto, plus the actual freight to Port-aux-Basque[s] or St. John's as we would pay. The same principle was used for Maritime prices, so you will note that all 1951 prices represent an appreciable jump over 1950".

Questioned concerning this letter Mr. Campbell stated that the first portion "definitely indicates, as I recall, that it was not what you might call open price competition for business down there" (Evidence, p. 424).

He also stated that the course followed in this instance, as set out in Serial 2702, was not unusual in the days of the Metal Culvert Council, but would be unusual today.

Other documentary evidence from early in 1951 indicates further discussions between officials of Armco, Westeel and Rosco at which an agreement on prices was reached. A letter from Mr. E. L. Campbell to Mr. J. K. Young dated February 23, 1951 has this as its first paragraph:

"All the prices in this were worked out and agreed upon with the other companies, the major two of which have definitely agreed that their agents in St. John's will not be permitted to extend any trade discount."

(Serial 2735)

Efforts to make sure that distributors and dealers would not cut prices to the Newfoundland government by reducing their own margin continued to be made. For example, in 1953 Pedlar informed its dealers that if orders were obtained at a cut price the company would not accept them. Undoubtedly these efforts to prevent price cutting had some effect but it seems they were not too successful. Thus in 1952 Armco correspondence states that when the Newfoundland bids were opened one quotation was found to be lower than the others and another company then lowered its price to meet the low bid. Again in 1953 an Armco report of March 7th stated that all the tenders were equal but that one firm (which the government did not intend to favour with the business) had expressed a willingness to reduce its total price by a small percentage. A series of intra Pedlar letters and telegrams in May indicates that competing companies had reduced their price by 5 per cent and that Pedlar authorized its dealers to do the same. The business was apparently divided between Armco and Westeel on the basis of this 5 per cent reduction.

(c) Conclusions on the Question of Price Leadership or Price Agreement

In the Commission's opinion the evidence taken as a whole points irresistibly to the conclusion that uniform prices in this industry have resulted not from simple price leadership, but from discussions and agreements on prices. Armco's voice has been by far the most influential in the determination of prices and related matters, but there are cases on record in which its views have not prevailed, cases in which its position has been modified after discussion with other companies

and apparently in deference to their views. The Commission cannot accept the argument that the many references in minutes of meetings, and in correspondence and reports, to agreements on prices, and the several references to lengthy price discussions, can be dismissed as too formal, misleading or incorrect expressions. The further activities of companies described in part above, with reference to:

Sales by other companies at below list prices.

Tenders submitted by other companies at below list price.

Charges for coating and arching in British Columbia.

Prices in Newfoundland since its confederation with Canada.

all confirm the Commission's view that uniform prices have resulted from agreement.

Some of the companies have played a very minor part in the arrangements concerning prices. For example while Mr. F. C. M. Forster, on acquiring Corrugated Pipe in 1946, became a member of the Metal Culvert Council, and attended meetings both while it continued to operate and afterwards, there is no evidence that he initiated any policy proposals. During his first years, as a newcomer with a small business, he probably obtained much perfectly legitimate information that was helpful in his business from members of the Council. He stated that since 1952, the price for a particular pipe as shown on his price list has occasionally varied slightly from the corresponding price on Armco's list, but his general practice seems clearly to have been to keep his prices in line with those of other manufacturers.

Again, Pounder was only engaged in the manufacture of metal culverts for less than two years before the inquiry, though it had been associated with Rosco for some years before that and was to some extent familiar with the activities of the Western Section of the Council. Pounder was never a member of the Council, and made no payments to it, but a representative attended some of the western meetings. This company seems to have been quite willing to co-operate with the others in setting and maintaining uniform prices, perhaps feeling that only by doing so could it expect its new culvert manufacturing business to be successful in competition with much larger long-established firms.

The participation of Robertson-Irwin in inter-company discussions appears to have been relatively slight. Like Corrugated Pipe and Pounder it is a comparative newcomer in the metal culvert field, commencing to manufacture in 1947 in Hamilton, and expanding its production in 1952 by opening a plant in Edmonton. It became associated with the Metal Culvert Council in 1947 and was a member until Mr. Frame's office was closed in 1952. A representative of the company attended at least one meeting during Mr. Frame's regime and two informal gatherings of culvert manufacturers around Christmas time in two subsequent years. It also had a representative in the Western Group from early 1953 who attended a number of meetings. There is no evidence that the company

took any active part in decisions concerning prices. It did publish and maintain prices identical with those of the other companies. Counsel for the company maintained that it had simply followed Armco's prices and was not a party to any agreement or understanding concerning uniform prices. The scientific, technical, manufacturing and selling information obtained by its representative at these meetings from older and more experienced companies and more especially from Armco was doubtless of real value, but we think gaining such information was not the only purpose of attendance, nor was it necessary to be a member of the group, attend meetings or pay fees in order to follow Armco's prices. There can be no doubt that the company had knowledge of the common practices with respect to prices and allied matters followed by members of the industry and that it co-operated with other companies in maintaining uniform prices.

With respect to Pedlar its resignation from the Metal Culvert Council in 1948 seems to have been based upon opposition to a formal organization of manufacturers rather than upon unwillingness to seek the same ends by informal co-operative means. In the West it was not very long before a representative began to attend at least some meetings. In the East a representative attended meetings of manufacturers after the Council was dissolved in 1952. From a considerable volume of correspondence, some of which has been specifically referred to in this report, there seems to be no doubt that Pedlar co-operated with the others in seeking to maintain uniform prices. On one occasion in 1950, as stated in a letter already quoted, Pedlar asked Mr. Frame to investigate prices quoted by other companies to the government of Newfoundland.

## CHAPTER V

### EFFECTS UPON THE PUBLIC INTEREST OF THE ARRANGEMENTS AND PRACTICES IN THE INDUSTRY

It was argued before the Commission that the Price Schedules, price change sheets, "rules and regulations", "sundry rules" and "sundry information" issued by the Council Secretaries and in the East since 1952 by Armco were intended to be used by the manufacturers as guides to assist them in making up their own price lists and that there was no undertaking or obligation on the part of individual manufacturers that they would follow the rules or adhere to the prices. However, the evidence as reviewed in part in Chapter IV has established both that there was a well-accepted arrangement and understanding, amounting in our opinion to agreement, that the rules and prices so distributed would be followed and that in fact they have been closely adhered to in the price lists issued by the several manufacturers and in the prices actually charged by them. Some exceptions have been noted in which prices lower than schedule prices have been charged, but these have been quite unusual and have affected only a very small part of the total culvert sales.

Arrangements of this kind adhered to to the extent indicated in this report naturally produce a very substantial interference with price competition between those who are parties to them, and the public is thereby deprived of the benefit that might normally be expected to flow from such competition in a free enterprise economy. The danger of public detriment which flows from the absence of price competition is enhanced where the share of the total market enjoyed by the parties to the arrangements is high. In this case, from tables compiled from figures supplied by the manufacturers to the Dominion Bureau of Statistics, we find that in the last five years prior to this inquiry, 1950 to 1954 inclusive, the manufacturers against whom allegations were made in the Statement of Evidence have enjoyed, in dollar value, in each year, more than 97 per cent of the total metal culvert production in Canada. In each of those years the production of the three largest company organizations has exceeded 80 per cent of Canadian production. Leaving aside for the moment the question of competition from culverts made of other materials than metal, these figures indicate that for metal culverts there has been no alternative source of supply throughout practically the entire country. With respect to imports, we have seen that, aside from a few specialized items, metal culvert imports have been negligible. The tariff protection against imports from the United States, the only country from which imports of

culverts or culvert steel have come, runs from 12 1/2 per cent to 17 1/2 per cent. The evidence indicates that the laid-down cost of culverts or culvert sheets imported from the United States is higher than that of the corresponding Canadian product.

Two arguments were strongly urged upon the Commission

1. That because of the ever-present competition from culverts made of other materials, particularly concrete, the metal culvert manufacturers have not enjoyed a monopoly position in the culvert market, and that competition from concrete has always been the chief factor considered by metal culvert manufacturers when establishing their prices. In effect this argument means that the metal culvert manufacturers were not in a position to act in a fashion detrimental to the public interest, even if they had wished to do so.
2. That there is no evidence that the metal culvert industry has operated in a manner against the interest of and to the detriment of the public, but on the contrary the evidence indicates that the industry has operated to the benefit of the public.

The evidence relative to each of these arguments will be examined in turn.

### 1. Concrete Competition

#### (a) Costs and Qualities of Metal and Concrete Culverts

While there is some evidence of competition from cement asbestos and vitrified tile pipe, and in some areas, e.g., Northern Saskatchewan, from creosoted wood box culverts, the competitive products about which real concern was expressed by company officials in giving evidence were concrete pipe and concrete box culverts, the latter being poured in place at the culvert site. Witnesses from half a dozen companies were questioned about competition from concrete. They emphasized its importance and the frequency with which this subject was a matter of discussion at meetings of the Council, both Eastern and Western Sections. Mr. Sill, the Western Secretary, also spoke of discussions concerning concrete and also wood, as competitive products, as follows:

"Q. You have mentioned a number of matters that were discussed at meetings. I think perhaps you mentioned competition from concrete and wood?

A. Right.

Q. Generally what would the discussion on those subjects be, along what lines would the discussion be?

A. Well, generally they regarded both types of competition as serious and it was in connection with any price changes that were put into effect, those price changes were considered in relation to outside competition.

Q. Are you saying that such matters were largely discussed in relation to prices?

A. Right. In other words, the members would weigh the situation against the competition."

(Evidence, p. 755)

Mr. C. H. Gagan (Canada Culvert) stated that metal culvert pipe and concrete culvert pipe were interchangeable for most jobs regardless of size, the customer having a choice of using either one.

Mr. E. L. Campbell (Armco) emphasized a further point in this connection:

"Yet our own policy all through this, we will call it inflationary post-war period, has been to be most conservative with pricing our corrugated pipe products, in that we have never increased our prices more than the amount of the increase in our raw material, steel sheets, and in some cases we have not increased our prices even when we were advised of an increase in steel.

From our company's standpoint that has been possible through increased volume of business that we have been getting by means of a very broad sales organization across Canada. We have over 30 graduate trained drainage engineers.

Having in mind all that cost, I started out to show how we were able to do this through increased volume and increased efficiency in the production of corrugated metal pipe in our plants. We can show evidence of how much we have increased that efficiency, but that has not lessened the impact of higher labour costs and all the other higher costs of doing business.

So that we have been able to go through these last ten years with a very conservative price policy which basically

was aimed at getting greater and greater acceptance of corrugated metal pipe against concrete pipe and wood and treated wood and concrete boxes.

To me our policy in keeping those price increases very conservative is one of the reasons why we have developed this greater acceptance and have been able to get this higher volume, although of course the net effect of it is that in the percentage across the country we have had a definitely decreasing gross margin over the last eight or ten years, but we have had a higher volume to justify it."

(Evidence, pp. 297-9)

From the foregoing and other similar evidence the Commission is satisfied that the metal culvert manufacturers have regarded concrete pipe as affording very real and ever-present competition to their own product. They have considered that their hope for a growing share in the total Canadian culvert market lay in convincing government engineers and other agents of culvert purchasers that metal culverts were superior to wood or tile or, more especially, to concrete, and would prove more advantageous to the purchasers than culverts of any other material. Armco takes pride in educational work carried on by it for many years to this end, and in the results obtained. For example, in Mr. E. L. Campbell's evidence these long-continued efforts opened to metal culverts the market for drainage under Ontario provincial highways (in 1955), saved and expanded the metal culvert business in British Columbia, largely through the merits of its coating, paving and arching processes, and obtained for metal culverts an increased share of airport drainage.

It is an essential point in the argument advanced concerning concrete competition that the market relevant to this inquiry is not the market for metal culverts, but the total Canadian market for culverts, of whatever material they may be made, at least wherever one material, e.g., concrete, may be used as a substitute for another, e.g., metal. Put in another way the Commission has been urged to concern itself in this inquiry not with metal culverts alone, but has been invited to consider the entire range of materials or products which may be used as culverts as constituting a single industry and to consider competition among these various products as the competition referred to in the Combines Investigation Act and in the Criminal Code. Before appraising the validity of this contention the Commission believes it will be helpful to consider the circumstances under which substitutable products are deemed to be competitive in economic theory.

To begin with it is obvious that in regard to the use of alternative materials or products the culvert field is not at all unique.

There are many construction materials which, in certain circumstances, may be used instead of something else. There are many types of roofing materials, such as wooden shingles, asbestos shingles, asphalt shingles, metal roofs, etc. In the case of structural materials many examples come to mind, such as structural steel, wooden timbers, laminated products, poured concrete, pre-cast concrete, etc. In practically any field of industry to which one may turn the same situation will be found, but such a condition is not regarded as sufficient to establish all the products which may be used for the same general purpose as constituting a single industry.

In economic literature the question of the degree of competition among possible substitute products is related to the responsiveness of the demand for one product in relation to a change in price of another. The concept is generally referred to as the cross-elasticity of demand and has been defined by one writer as follows:

" . . . Cross-elasticity of demand is the ratio which the relative change in the quantity of product sold (at a given price) by A bears to the relative change of price charged by B (which is causing the change in A's sales). . . . " \*

While the foregoing definition relates the situation to that existing between two firms the concept may be extended to the situation existing between the products of different manufacturing groups. At the one extreme is the situation where sales by A would be entirely unaffected by a change in price by B. In such a case it is clear that no effective competition exists between A and B. At the other extreme would be the situation where a cut in B's price, A's price remaining unchanged, or an increase in A's price, B's price remaining unchanged, would result in A ceasing to make any sales. In such a situation it would appear that A's price and sales were subject to effective competition.

Actual market situations have firms in varying relationships between these two extremes and in most cases there would be some differentiation of products which would preclude complete homogeneity. However, the degree of responsiveness to a price change will give some indication of the absence or presence of effective competition. In other words, slight or no response would indicate that there is no effective competition between the products while a response involving corresponding changes in magnitude and time would indicate competition of a significant nature.

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\* Fritz Machlup, The Economics of Sellers' Competition, (Baltimore, 1952), p. 214.

There is a further point which should be noted in connection with products which may be substituted for each other, where one product is produced in an industry of rapidly advancing technology accompanied by rapid reduction in costs. In such circumstances it may not be possible for the costs of older products to be reduced to permit lower selling prices which would be competitive with the new product, and in such circumstances either there would be a decline in the volume of output of the older product or, in the case of a rapidly expanding market, the new product would supply a larger and larger share of the market.

The features involved in the various situations referred to above may be readily illustrated by taking some commodities whose market positions are a matter of common knowledge. In the food field, pork and beef are the principal classes of meat products. They are, of course, not identical and one or the other is preferred for some uses and by some consumers. Nevertheless they meet the same general need and it would be expected that if, for example, the price of beef remained constant while the price of pork declined there would be a shift in demand from beef to pork and the shift would be in the other direction if the price situation was reversed.

The following comments on shifts in the consumption of beef and pork in Canada in response to changes in the relative prices of the two meats are contained in a study by the Economics Branch of the Department of Agriculture for the period 1927-1951:

"According to various studies of food consumption, the Canadian consumer has a stronger preference for beef than for other meats. These studies also indicate that he will not hesitate to substitute pork for beef when beef prices 'get out of line' . . . ." \*

"When the price of beef was high relative to the price of pork, the consumption of beef was low by comparison with the consumption of pork. . . ." \*\*

"The average relationship between relative prices and consumption during the period 1927-28 to 1950-51 is such that a one per cent change in the price of beef relative

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\* T. G. E. Woollam, "The Influence of Prices on the Relative Consumption of Beef and Pork", The Economic Annalist, (April, 1953), Department of Agriculture, Ottawa, p. 29.

\*\* Ibid., p. 30.

to the price of pork results in a one per cent change in the opposite direction in the consumption of beef relative to that of pork. . . ." \*

It was found in this study that when the price of beef was 50 per cent higher than that of pork the consumption of beef was only 69 per cent that of pork. On the other hand when the price of beef was only 69 per cent that of pork the consumption of beef was 50 per cent greater than that of pork.

The competition which arose between silk and rayon and later nylon illustrates the situation when a product with decreasing costs replaces a product for which cost reductions on a similar scale are not possible. As the price of rayon declined with rapidly increasing production in the late 1920's the price of silk also fell (particularly after the onset of the depression) but the consumption of silk also declined. On the other hand, the consumption of rayon continued upward even in the depression years.

It will be recognized that even in these simple examples perfect substitutability of the products is not suggested, and in a more recent case, that of natural rubber and synthetic rubber, it is apparent that while there is a range of uses for which both commodities may be employed, each product possesses certain features which make natural rubber the more desired material in some end products and synthetic rubber in others.

The limitations which may exist in the price competition among products used for similar purposes is suggested by the following reference in Professor Markham's study, Competition in the Rayon Industry:

"Since rayon is a textile fiber, substitutable for other textile fibers that experience day-to-day price changes, it may well be asked how moderately stable rayon prices are possible, even from season to season? An answer could conceivably be found in the imperfect substitutability among textile fibers. Over short periods of time, silk, cotton, and wool prices may fluctuate inside margins which, only if exceeded, would result in a transference of demand between natural fibers and rayon. When these margins are exceeded, particularly over the business cycle, demand for rayon and, therefore, rayon inventories, are sufficiently affected to bring about rayon price revisions. Hence, the price of rayon may be virtually independent of short-run price fluctuations of natural

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\* Ibid., p. 31.

fibers but considerably influenced by natural fiber prices over the course of a business cycle. . ." \*

We may now turn to the evidence put before the Commission relating to the prices and output of steel culverts and concrete pipe to see what indication is given of the nature of competition between these two groups of products. It may be noted first that with respect to standard steel culverts there is close similarity among the products of the various manufacturers and, in most respects, they may be regarded as homogeneous. Steel culverts and concrete pipe are dissimilar products, and while, in some cases, they may be put to the same use, the purchaser would not accept concrete pipe in the place of steel culvert or vice versa without making a deliberate choice, whereas he might be indifferent as to which make of standard galvanized steel culvert he purchased. With respect to other classes of steel culverts differentiation of product may be more significant.

The dissimilarity in nature of steel culverts and concrete pipe results in differences in costs of installing such products as culverts and, in addition, there are differences in the terms on which such products have been sold which may result in other differences in cost to the purchaser. For example, steel culverts have been sold on a delivered basis over wide areas with payment net 30 days or some other period. The one manufacturer of concrete pipe in Ontario who gave evidence had been selling until 1955 at a delivered price within the Toronto area only and giving a 5 per cent discount for cash. In that year his policy changed and he adopted a delivered price within a radius of 250 miles.

The evidence of officials of culvert manufacturers and also of railway, provincial government and county engineers is to the effect that the initial manufacturer's price of concrete pipe for culvert purposes, whether plain or reinforced, is somewhat less than that for corrugated metal pipe of similar drainage capacity. One exception apparently exists, viz., the extra-strength reinforced concrete pipe used under railway tracks is more expensive than metal pipe. Some of the engineering evidence also indicates that reinforced concrete pipe when properly installed and maintained will generally be expected to have a longer life than metal pipe. This opinion was not unanimous, however. Thus one engineer saw no reason why good asbestos bonded metal pipe should not last a hundred years. Other engineers pointed out that with a weak or soft foundation, or where frost heaving may be anticipated, particularly where a high overhead fill is required, concrete pipe, being rigid, is apt to open up at the joints or crack at the top, while metal pipe, being flexible, will take such strains without giving way. On the

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\* Jesse W. Markham, Competition in the Rayon Industry, (Cambridge, 1952), p. 142.

other hand concrete is not so likely to flatten under loads. Some engineers had a much better opinion of large concrete box structures than of concrete pipe.

Transportation costs for concrete pipe are substantially higher than for metal pipe, so that if the structure is to be installed at a considerable distance from the manufacturing plant, metal may have a net cost advantage.

Most of the engineers said the costs of preparing the trench and the cost of installation is higher for concrete than for metal, and it seems clearly established that metal pipe has a distinct advantage in speed of installation. In some circumstances, e.g., railway maintenance, this advantage may be of paramount importance.

The evidence does not afford any measures as to the actual differences in costs which might be caused by the various factors but it would appear that they would not be insignificant.

In addition to the differences between steel culverts and concrete pipe, there is the further factor that concrete culverts may be structures made on the job. Any comparison between the latter and manufactured steel culverts would be extremely complicated and the evidence gives no indication of the relative costs, installed, of the two types of culvert.

There is one conclusion which would appear to be justified by the evidence, and that is that it would be extremely unlikely that the costs of producing steel culverts and concrete culverts in their various forms would be affected in exactly the same manner, to the same extent and at the same time. In other words, it is likely that production costs of the various products would show significant variations at any particular time or over a period of time.

The corrugations in metal pipe cause water to flow less freely than through smooth pipe. A somewhat larger metal pipe is required, therefore, to carry off the same amount of water as a concrete pipe. The exact difference was not established in evidence but for the purpose of this inquiry it has been assumed that a corrugated metal pipe with a diameter about one-fifth larger than a corresponding concrete pipe would have the same water-carrying capacity.

For the purpose of comparing prices and price changes during the last few years, as between standard round corrugated metal culvert pipe and standard reinforced concrete culvert pipe, the Commission has prepared Tables 2 and 3 from price lists included in the evidence.

Table 2

Prices of Corrugated Metal Culverts to Municipalities and the  
Provincial Government and Prices of Concrete Pipe,  
Ontario, 1950-1955

(Prices per lineal foot)									
Date	Metal Culverts 30" 14 ga.		Metal Culverts 36" 12 ga.		Metal Culverts 72" 10 ga.		Metal Culverts 72" 10 ga.		Concrete Pipe 60"(2)*** \$
	Municipal* \$	Provincial (1)** \$	Concrete Pipe 24" (2)*** \$	Municipal* \$	Provincial (1)** \$	Concrete Pipe 30"(2)*** \$	Municipal* \$	Provincial ** \$	
Jan. 1950	4.75	3.96	-	7.95	6.63	-	21.73	18.13	-
Feb. 1950	4.75	3.96	4.42	7.95	6.63	6.46	21.73	18.13	21.90
Jan. 1951	5.49	4.58	4.42	9.21	7.67	6.46	25.06	20.93	21.90
Feb. 1951	5.49	4.72	4.29	9.21	7.90	6.27	25.06	21.56	21.30
Aug. 1951	5.49	4.72	4.55	9.21	7.90	6.65	25.06	21.56	22.50
Jan. 1952	5.82	4.76	4.55	9.76	7.98	6.65	26.56	21.77	22.50
Jan. 1953	5.82	4.76	4.55	9.76	7.98	6.65	26.56	21.77	22.50
Jan. 1954	5.82	4.76	4.42	9.76	7.98	6.46	26.56	21.77	21.90
Dec. 1954	5.53	4.76	4.42	9.26	7.98	6.46	25.27	21.77	21.90
May 1955	5.53	4.76	4.81	9.26	7.98	7.03	25.27	21.77	23.70
Aug. 1955	5.75	4.95	4.81	9.63	8.30	7.03	26.28	22.64	23.70

\* Includes sales tax. \*\* Does not include sales tax. \*\*\* Sales tax not included until May, 1955.

Sources: (1) Exhibit H-21, p. 42 (3) Serial 1756 (6) Serial 2359 (9) Serial 3070

(2) Return of Concrete Pipe Limited, (4) Serial 1759 (7) Serial 2979 (10) Serial 3093

Toronto, dated March 6, 1956 (5) Exhibit H-6 (8) Based on 60" prices as

shown on Exhibit H-21, p. 42

Table 3

Indexes of Prices of Corrugated Metal Culverts to Municipalities  
and the Provincial Government and Prices of Concrete Pipe,  
Ontario, 1950-1955

Jan. - Feb. 1950 = 100

Date	Metal Culverts 30" 14 ga.		Concrete Pipe 24"		Metal Culverts 36" 12 ga.		Concrete Pipe 30"		Metal Culverts 72" 10 ga.		Concrete Pipe 60"	
	Municipal	Provincial	Municipal	Provincial	Municipal	Provincial	Municipal	Provincial	Municipal	Provincial	Municipal	Provincial
Jan. 1950	100.0	100.0	-	-	100.0	100.0	-	-	100.0	100.0	-	-
Feb. 1950	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Jan. 1951	115.6	115.7	100.0	100.0	115.9	115.7	100.0	100.0	115.3	115.4	100.0	100.0
Feb. 1951	115.6	119.2	97.1	97.1	115.9	119.2	97.1	97.1	115.3	118.9	97.3	97.3
Aug. 1951	115.6	119.2	102.9	102.9	115.9	119.2	102.9	102.9	115.3	118.9	102.7	102.7
Jan. 1952	122.5	120.2	102.9	102.9	122.8	120.4	102.9	102.9	122.2	120.1	102.7	102.7
Jan. 1953	122.5	120.2	102.9	102.9	122.8	120.4	102.9	102.9	122.2	120.1	102.7	102.7
Jan. 1954	122.5	120.2	100.0	100.0	122.8	120.4	100.0	100.0	122.2	120.1	100.0	100.0
Dec. 1954	116.4	120.2	100.0	100.0	116.5	120.4	100.0	100.0	116.3	120.1	100.0	100.0
May 1955	116.4	120.2	108.8*	108.8*	116.5	120.4	108.8*	108.8*	116.3	120.1	108.2*	108.2*
Aug. 1955	121.1	125.0	108.8	108.8	121.1	125.2	108.8	108.8	120.9	124.9	108.2	108.2

\* Sales Tax included from May, 1955.

For sources see Table 2.

These tables show the months in the various years when changes in prices became effective for metal culverts and concrete pipe of similar carrying capacities in the period 1950 to 1955. The material is not satisfactory in one important respect. The prices for concrete pipe were obtained from one large Toronto concrete pipe manufacturer only, and may not be a reliable guide to prices in the industry generally. There may be more variation in concrete pipe prices as between makers and localities than has prevailed for metal pipe. One further minor source of inaccuracy results from comparing 24" concrete pipe with 30" metal pipe. 25" concrete pipe would have the same carrying capacity as 30" metal pipe on the basis we have assumed to be correct, but the Commission has seen no prices for 25" concrete pipe. Perhaps it is not made in that diameter. With these limitations in mind the tables may be used, we believe, to show in a general way, what effect a price change in pipe of one materials has had upon the price of the other.

We may first note the changes which were made in January, 1951. At that time prices of metal culverts were increased approximately 15 per cent, while in the following month prices of concrete pipe were reduced about 3 per cent. No further change was made in municipal prices of metal culverts until January, 1952 but a further increase in provincial government prices of metal culverts was made in February, 1951. The reduced prices of concrete pipe remained in effect until August, 1951 when prices were increased by about 6 per cent from the reduced level. The advance over 1950 prices was, however, only about half the percentage increase made in the prices of metal culverts.

Prices of metal culverts, as already mentioned, were increased in January, 1952, and then remained unchanged until December, 1954. Prices of concrete pipe, on the other hand, had been reduced to the 1950 level in January, 1954.

In December, 1954 a new pricing structure was adopted in Ontario for metal culverts. Up to this time there had been a carload price to the provincial government and also a less than carload price at a higher level. The change made in December, 1954 applied the carload price to a sale in any quantity to the provincial government. At the same time other price schedules were related to the carload provincial price and this resulted in a reduction in the municipal price but the new municipal prices were higher than those which were in effect in 1951. The prices of concrete pipe which came into effect in January, 1954 remained unchanged until May, 1955 when a new basis of prices was established. Although an increase in prices of approximately 8 per cent is shown for the latter date it is not clear that there was actually an increase in cost to the purchaser because sales tax of 10 per cent, which had previously been extra, was now included in the price and the delivery zone was greatly extended. On the whole,

therefore, it would appear that actual prices of concrete pipe remained relatively unchanged in 1955 and, making allowance for the sales tax, were still about at the 1950 level.

Prices of metal culverts remained unchanged until August, 1955 when an increase was made. In the case of municipal prices the new level did not restore that prevailing prior to December, 1954 but as carload prices to the provincial government had not been reduced in December, 1954 the new provincial prices were about 4 per cent higher than those prevailing previously.

While no special significance is attached to the matter it may be noted that in February, 1950 the municipal price of 72" 10 ga. metal culvert was almost the same as that of 60" concrete pipe, \$21.73 for metal culvert and \$21.90 for concrete pipe. The price to the provincial government of 72" metal culvert at that time was \$18.13. Actually the municipal metal culvert price in 1950 would be about 8 per cent less than the price of concrete pipe because the sales tax was included in the price of the former but not in that of the latter. In the case of the provincial government price the sales tax was not included. In 1951 the relative prices altered substantially. The municipal price of metal culvert advanced well above the price of concrete pipe and has since maintained this position, while the provincial government price of metal culvert has approximated that of concrete pipe.

But briefly, the evidence which is available as to prices indicates that the prices of metal culvert and concrete pipe are independent rather than inter-dependent. There appears, therefore, to be a wide margin within which prices of metal culvert may be altered without being considered by the manufacturers to prejudice its continued sale. It must be concluded that with respect to price, metal culverts are not subject to effective competition from concrete culverts.

Having looked at price changes as between concrete and metal pipe and their effect upon each other, we shall now examine, as far as the available information will allow, the effect upon metal culvert production of changes in the price relationship of metal and concrete culverts. The information we have does not break down the production figures for metal and concrete culvert pipe in a detailed fashion which would permit comparisons as to production of different classes of pipe. Table 4 gives the total Canadian production in tons of the two products in recent years.

Table 4

Production of Metal Culverts and  
Concrete Pipe in Canada, 1950-1956

<u>Year</u>	<u>Metal Culverts</u> tons	<u>Concrete Pipe</u> tons
1950	20,767	131,641
1951	21,827	234,616
1952	27,987	234,616
1953	30,348	267,461
1954	34,740	328,670
1955	46,600	433,419
1956	55,754*	551,908

\* Preliminary.

Sources: For metal culverts - Dominion Bureau of Statistics  
For concrete pipe - Exhibit H-21, p. 36

It will be seen from the above figures that in the period 1950 to 1954 the output of both types of products increased substantially with production of concrete pipe rising more rapidly than that of metal culverts, but it is not known to what extent supplies of steel sheets limited production in any period. It will be recalled that at the beginning of 1954 there was a reduction in the prices of the Toronto manufacturer of concrete pipe while the price of metal culverts was unchanged. It will be seen from the above table that the output of metal culverts increased about 14 1/2 per cent in 1954 compared with 1953 while the production of concrete culverts rose about 23 per cent. While we do not have production figures of concrete pipe for Ontario, the output of metal culverts in Ontario in 1954 increased approximately 40 per cent over the output in 1953, as shown by figures obtained from the Dominion Bureau of Statistics, the largest increase recorded since 1950. It would appear, therefore, that the changed price relationship between metal culvert and concrete pipe in 1954 did not affect the output of the former.

(b) Conclusions as to Competition from Concrete

There is no doubt that concrete pipe and also concrete box structures poured on the site have enjoyed and continue to enjoy a large part of the total culvert market. It is also clear that from a physical point of view concrete may be substituted for metal in most cases. On the other hand there are many influences besides the initial price of the culvert which determine the choice that is made in a great many cases between concrete and metal. The principal

influences made known to the Commission, some of which have already been mentioned are:

- (1) Size of pipe required. For small structures under highways and railways metal seems to be preferred, while for very large structures the preference appears to be in favour of poured concrete boxes. In medium sizes there appears to be little advantage for either material over the other.
- (2) Nature of the foundation under the culvert.
- (3) Depth of fill required above the culvert.
- (4) Whether much abrasive or corrosive material is expected.
- (5) Whether the work is original construction or maintenance and repair of a road or railway track.
- (6) Weight of anticipated traffic, e.g., railway trains or motor vehicles.
- (7) Cost of transportation from factory to culvert site, or in the case of poured concrete structures, from the cement plant and sand and gravel pits to the culvert site.
- (8) Cost of installation at the site.
- (9) Speed of installation. In many cases the work must be done quickly, e.g., in railway maintenance or repair. In other cases, to prevent losses from traffic delays, it may be necessary to construct a by-pass around the site unless the work can be complete quickly.
- (10) Anticipated length of life of the culvert.
- (11) Desire to purchase from local manufacturer rather than from distant one. This frequently gives some advantage to concrete over metal for there are many concrete pipe plants spread fairly widely throughout the provinces, but only a comparatively few metal culvert plants much more centrally located.

Other influences affecting the choice between concrete and metal could no doubt be cited. The Commission believes that the total effect of all such factors is very considerable. The result is that metal culvert prices may be changed to a substantial extent in

relation to the price of concrete culverts without any significant effect upon metal culvert sales. We are therefore of the opinion that concrete as a substitute for metal culverts does not afford effective competition.

The Commission has not examined the competitive relationship between metal culverts and those made from other products than concrete, viz., creosoted wood, vitrified tile and cement asbestos. These materials appear to be of much less importance than concrete and no distinctive argument was addressed to us with respect to any of them. We believe that an examination related to these materials would not lead to results substantially different from those we have reached in relation to concrete.

The end result is that in our opinion this inquiry should properly be confined to the metal culvert industry and to competition in metal culverts as constituting the relevant market.

## 2. Detriment to the Public

### (a) General Comment

The economists called on behalf of the manufacturers, Mr. G. F. Bain and Mr. J. N. Wolfe, presented statistical evidence, and argued both on the basis of economic theory and on their interpretation of evidence in this inquiry, that even if the pricing and related practices in the metal culvert industry were found to be collusive, no detriment had resulted to the public, but on the contrary there had been positive public benefit. It was contended that the least favourable conclusion, from the point of view of the manufacturers, that could properly be drawn from the evidence, was that the Director's allegations of public detriment had not been proved.

The Commission is indebted to Messrs. Bain and Wolfe for the submission of a theoretical brief (Exhibit H-22), setting out in succinct fashion, supported by numerous references to written views and opinions of many economists, arguments against a rigid rule of thumb conclusion that collusive arrangements in respect of price must necessarily lead to injury or detriment to the public. The brief outlined several sets of circumstances in which it might be said either that the only result of collusion was public benefit or that the balance of detrimental and beneficial results was definitely on the side of public benefit. While some emphasis was laid upon these examples, the principal argument of the brief was that the question of public detriment or public benefit arising from collusive arrangements was not an easy matter to determine. Mr. Wolfe did give it as his opinion that if one were to examine a hundred collusive arrangements the odds would be against finding many that were beneficial to the public. However, to establish whether there is public detriment requires that each case be

examined carefully on its merits.

With this theoretical basis, Messrs. Bain and Wolfe submitted a number of graphs, charts and tables dealing with prices, tariffs, wages, cost of sheet steel, gross margins, net profits and other matters relating to the metal culvert industry or to industries which were competitive with it or which used a similar basic material, steel. It was contended that this material, together with other evidence in the inquiry, negated many circumstances and results which, in other inquiries, had been considered detrimental to the public. Mr. Wolfe's final conclusion was that the material at his disposal did not enable him to say, on other grounds, that the alleged collusion had resulted in actual public detriment of a substantial nature.

Some of the matters discussed by Mr. Bain and Mr. Wolfe are not in dispute or can be disposed of without much comment. Thus the Director did not allege that the group of manufacturers with which this inquiry is concerned, or any of them, has attempted to make it difficult for a newcomer to enter the metal culvert industry. Nor does it appear that technological skills create any serious obstacle. No great amount of capital is required to enter this industry. Demand for culverts has expanded greatly in the post-war period. In this situation, if prices and profits were maintained by collusive arrangements at higher levels than those prevailing in other industries, one would expect many new entrants into the industry, leading to surplus capacity and lessened profits even if the high prices continued. Since 1947 only two completely new manufacturers have entered the field, from which Mr. Wolfe argued that any allegation that public detriment had been occasioned by the development of surplus capacity, did not have much empirical support. His argument is weakened somewhat by the fact that several of the manufacturers in the group have greatly expanded their capacity and have opened new plants in various parts of Canada since 1947. The Commission has no evidence as to the existence or otherwise of surplus capacity in this industry. It may exist. Again, rapid expansion by existing manufacturers may well have discouraged possible new manufacturers. In any event the argument is something of a straw man, as the Director has made no allegations concerning public detriment based on surplus capacity. It should also be borne in mind that at various times in the post-war period steel plants have been unable to keep up with the demands for their products. At such times the output of metal culverts has been limited by the availability of steel sheets. This factor would also have a bearing on the development of new culvert plants because suppliers of steel sheets would be unlikely to accept new customers at a time when they could not fill the requirements of old ones.

Again, the Director has not alleged that the prices charged in the metal culvert industry have been set so as to take full advantage of tariff protection. The limited, but possibly representative, figures on page 37 of Exhibit H-21 indicate that the American Armco's

prices at Middletown, Ohio, are almost always lower than the Canadian Armco's prices at Guelph, Ontario, for the same size and type of pipe, but that the price at which the American pipe can be laid down in Canada is always higher than the price of corresponding Canadian pipe, by amounts which have varied substantially since 1948 as between different sizes of pipe and different dates. These figures certainly do not suggest that Canadian prices have been set just below the laid-down cost of imported pipe, although the most recent figures, for 1955, show a narrow margin in some instances.

The information provided by the economists related only to the Ontario market so we do not know whether the relationship there shown between domestic prices and cost of imported pipe is the same in other markets, particularly in Western Canada.

A large part of the cost of metal culverts consists of the cost of galvanized steel sheets so that the degree to which advantage is taken of the tariff protection on metal culverts must be considered in relation to the relative cost of steel sheets to the Canadian culvert manufacturer and the cost of similar sheet to a culvert manufacturer in the United States. The duty on imported galvanized steel sheets from the United States is 17 1/2 per cent and on imported metal culverts the duty is 15 per cent. The effective protection of Canadian culvert manufacturers is increased to the extent to which steel sheets can be purchased in Canada below the laid-down cost of imported sheets. The relationship between raw material costs and effective tariff protection has been analysed by Professor C. L. Barber of the University of Manitoba in an article entitled, "Canadian Tariff Policy".\* Professor Barber gave the following example of the relationship in his study, "The Canadian Electrical Manufacturing Industry", prepared for the Royal Commission on Canada's Economic Prospects:

"The extent of import competition in different electrical products is dependent to a significant extent on the amount of effective tariff protection received by these products. Effective protection is a measure of the extent to which a tariff makes it possible for a firm's conversion costs or the value it adds through manufacture to exceed those of its competitor in another country. As such it may differ significantly from the level of the actual tariff rate. For example, if in the manufacture of a certain kind of electrical cable the cost of raw materials makes up 60% of the total selling value of the product, then the manufacturer's conversion costs or the value he adds through manufacture will be 40% of the total. If the tariff rate on this cable is 20% and if the Canadian manufacturer can buy his

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\* Canadian Journal of Economics and Political Science, (November, 1955), pp. 513-531.

raw materials as cheaply as his foreign competitor, then the effective level of protection to the Canadian manufacturer will be 50%; on cable valued at \$100 the duty of \$20 is equivalent to 50% of the \$40 worth of conversion costs embodied in the cable. Thus the effective level of tariff protection on a particular product may vary widely from the formal tariff rate depending on the product's raw material content and the price at which these materials can be purchased. "\*

The evidence in the inquiry does not show the base price of steel sheets in the United States which can be compared directly with the price of The Steel Co. of Canada, Limited, but Exhibit H-21 contains the following information as to the cost of imported steel sheets f. o. b. Guelph in comparison with the cost of Stelco sheets:

Table 5

Cost of Sheet Steel f. o. b. Guelph (per Cwt.)

	Stelco Sheet			U. S. Sheet			Per Cent Difference		
	12 ga.	14 ga.	16 ga.	12 ga.	14 ga.	16 ga.	12 ga.	14 ga.	16 ga.
	\$	\$	\$	\$	\$	\$	%	%	%
1950	6.72	6.72	6.82	7.21	7.66	8.22	7.29	13.99	20.53
1953	7.40	7.47	7.49	7.79	8.38	8.55	5.27	12.18	14.15
1956	7.77	8.03	8.37	9.67	9.97	10.37	24.45	24.16	23.89

Source: Exhibit H-21, p. 29

In the three years for which figures are given the cost of imported steel sheet has been substantially higher and in 1956 very substantially higher than the cost of Stelco sheet. This situation is in keeping with the following conclusion given in the study, "The Canadian Primary Iron and Steel Industry", prepared for the Royal Commission on Canada's Economic Prospects by Dr. Lucy Morgan:

"It seems to be fairly clear that full advantage of the tariff is not taken in the big eastern market where the Hamilton mills have a significant freight advantage over competing U.S. mills. The theoretical calculations shown in Table 27 indicate that Canadian delivered prices at Toronto, that is Hamilton mill prices plus freight to Toronto, are substantially below comparable U.S. delivered prices in that market, that is U.S. prices at the mills from which the competing products are likely to come, plus freight to Toronto plus duty calculated on

\* pp. 35-36.

the base prices. Canadian base prices are in most cases higher than U.S. base prices, but lower freight from Hamilton to Toronto more than offsets these higher base prices. . . ." \*

The examples of prices of steel sheets given in the study show the Canadian base price about 5 per cent higher than the base price in the United States. On the other hand, the freight cost on imported products would be higher than the freight cost on culvert products made in Canada.

On the basis of the gross margin information given for Armco it would appear that materials form about 50 to 60 per cent of the net sales value of metal culverts, and, of course, a higher proportion of manufacturing cost. It seems reasonable to assume that the freight advantage enjoyed by Canadian manufacturers over the transportation costs for imported metal culverts more than offsets any difference in the base price of steel sheets in the United States and Canada. In other words, the protection afforded by the tariff may be related to the conversion costs of Canadian culvert manufacturers. On this basis the effective tariff protection would be approximately 30 to 35 per cent of the gross margin over material costs, and a higher proportion of the conversion costs involved in the manufacture of metal culverts in Canada. From this point of view, therefore, it would indicate much less efficient operations in Canada than in the United States if the price of metal culverts in Canada was kept close to the cost of imported metal culverts.

(b) The Effect of Delivered Pricing in the Metal Culvert Industry

It will be remembered that except in the Province of British Columbia, and except for purchases by railroads, \*\* the metal culvert industry has operated for many years on a delivered price system within wide areas, usually coterminous with provincial boundaries. The Director did not attack this system directly in his allegations against the manufacturers, but the practice was discussed at some length by the economists heard by the Commission on behalf of the manufacturers.

It was argued that the delivered price system meant, in effect, a transfer of income from large, metropolitan, wealthy areas to poor, outlying, small-population areas. As a first step in support of this argument, an analysis of all the invoices of shipments by Armco in

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\* pp. 31-32.

\*\* In the case of railways prices are quoted f.o.b. manufacturing centres, i.e. in Ontario, f.o.b. London, Hamilton, Guelph, Toronto and Oshawa (Evidence, p.29).

the years 1949 and 1955 was made according to the size of the community to which each order was destined. The size of the community was broken down into three classes, namely, those under 3,999 people, those from 4,000 to 14,999 people and those over 15,000 people. The result of the analysis is shown in Exhibit H-19, which also appears as page 39 of Exhibit H-21 (see Table 6). Over 21,000 invoices were checked and the result of the analysis shows that in 1949 some 57.6 per cent in number of these invoices were destined to communities where the population was under 3,999. In 1955, there had been some reduction and only 51.8 per cent in number of the invoices were destined to these small-population areas. The dollar value of the invoices shows a different trend. In 1949, apparently 53.6 per cent of the invoices went to areas with a population of under 3,999, while in 1955, some 63.8 per cent in value of the invoices went to these small communities.

Table 6

Distribution of Armco Drainage and Metal Products of Canada, Ltd., all Canada Gross Sales by  
Community Size for Order Destination, 1949 and 1955

Population of Destination of Order*	Invoices			Dollar Value of Invoices				
	Number		Percent	Dollars		Percent		
	1949	1955	1949	1955	Absolute Dollar Increase \$1000 1949 - 1955	Approx. Change 1949 - 1955	1949	1955
Under 3,999	5,114	6,600	57.6	51.8	5,296	+ 275	53.6	63.8
4,000 - 14,999	545	1,144	6.1	8.4	718	+ 240	9.5	9.6
Over 15,000	3,220	5,054	36.3	39.8	1,426	+ 165	36.9	26.6
Total	8,879	12,798			7,440		100.0	100.0

\* According to 1951 Census definitions.

Source: Hand sortation of all invoices, excluding cancellations  
and returns; i.e., Gross Sales.

Sources: Exhibit H-19  
Exhibit H-21, p. 39.

The economists then endeavoured to show that not only was the trend in value of metal culvert markets towards smaller communities, but that these smaller communities were in the main outlying communities at considerable distances from the manufacturers' plants. For this purpose a second analysis was made of the Ontario invoices for 1955 for shipments going to small communities. The analysis was directed to the freight charged in respect of each shipment. Many of the invoices did not show the freight rate or were otherwise not usable for this purpose. In the end some 786 invoices were found capable of analysis in the view of the economists. Of these 786 invoices, however, 135 showed no freight whatever as being charged and as the economists pointed out at the hearing these 135 should properly be disregarded. The actual number of invoices subjected to this test therefore becomes 651.

As a result of this analysis of freight charges the economists prepared Exhibit H-20, which appears now as part of page 40 of Exhibit H-21. A corrected table from Exhibit H-20 appears as Table 7 hereof in which the freight charges are shown per hundred pounds instead of per pound as in the original exhibit.

The economists further submitted a table of rough average current cost per ton of shipping corrugated metal pipe to points in Ontario at certain representative distances from Toronto, this cost having been carefully prepared by Mr. H. M. Lloyd of Armco. A copy of this table, which is page 41 of Exhibit H-21, appears as Table 8 hereof, and the equivalent charges per hundred pounds are also shown.

The balance of page 40 of Exhibit H-21 is a chart showing the distribution frequency of the 786 invoices examined by the economists. From this chart it was argued that the average shipment cost somewhere between 8 and 9 mills per pound, or 80 to 90 cents per hundredweight, for freight, and the economists claimed that this average indicated a mileage of some 266 miles as the average distance from the Armco plant to place of destination. It was not claimed that the 266 miles was exact, but it was argued that the average would run somewhere between 175 miles and 300 miles and that this necessarily meant that a large proportion of the shipments went to outlying communities. Mr. Bain stated after eliminating the 135 invoices on which no freight had been charged, Exhibit H-20 indicated that 50 per cent of the invoices for shipments to small communities showed shipments of over 300 miles.

This conclusion was reached by reference to the table of freight charges compiled by Mr. Lloyd (Table 8). Mr. Lloyd's table shows an average freight rate of \$17.24 per ton (86¢ per cwt.) on the shipment of 36" pipe (this is a medium-sized pipe), at carlot rates from Toronto to Cornwall, a distance of 266 miles.

Table 7

Frequency Distribution of Armco Invoices Covering Shipments  
to Communities in Ontario of Less than 4,000 Population, 1955

<u>Freight per 100 lb.</u>	<u>No. of Invoices</u>
\$	
less than . 10	14
. 10	31
. 20	23
. 30	31
. 40	34
. 50	38
. 60	52
. 70	50
. 80	66
. 90	59
1. 00	43
1. 10	38
1. 20	24
1. 30	32
1. 40	30
1. 50	7
1. 60	25
1. 70	9
1. 80	6
1. 90	1
2. 00	6
2. 10	2
2. 20	5
2. 30	6
2. 40	1
2. 60	3
2. 70	3
2. 80	1
2. 90	2
3. 20	1
5. 80	1
6. 00	1
6. 20	1
6. 50	1
11. 80	1
12. 50	1
12. 80	1
16. 60	1
	<u>651</u>

Source: Exhibit H-20, Exhibit H-21, p. 40.

The Commission does not find the conclusion reached by the economists on this evidence to be convincing. In the first place, the invoices were analysed from the point of view of the population size of the point of destination. Apparently no analysis was made concerning the classification of the purchaser. The principal purchasers of culverts in Ontario are various departments of the provincial government and the Hydro-Electric Power Commission, counties and municipalities and the railways. In Western Provinces considerable purchases of culverts are made by the federal government as well as by the provincial governments. Probably no shipments to the steam railways were included in the list of invoices as the prices to railways do not include freight and the railways look after their own freight handling.

However, shipments to a department of the federal government or of the provincial government or to the Hydro-Electric Power Commission, though going to distant places, can hardly be said to mean, simply on the basis of delivered prices, a transfer of income from large metropolitan areas to small outlying communities. With respect to sales to municipalities, the argument is equally unconvincing. One is inclined to doubt that many shipments of culverts to small outlying communities are actually made at carload rates. Further, an examination of the table prepared by Mr. Lloyd (Table 8), shows only two items on which the average less than carload rates were below \$17.24 per ton or 86 cents per hundredweight. These two items are those for 12" and 18" pipe going a distance of 49 miles from Toronto to Guelph. All larger-sized pipe going even that distance and all shipments going longer distances show substantially higher L. C. L. rates than the average shown on the chart on page 40 of Exhibit H-21. When we bear in mind that the delivered culvert prices to municipalities in Ontario in recent years never included a discount for carload shipments, it appears highly probable that a very large proportion of municipal shipments were in fact made at L. C. L. rates. The evidence also indicates that it is very difficult to make up a full carload of round pipe unless it is shipped in various sizes which will permit nesting smaller pipes within the larger.

The conclusion the Commission has come to is that the average distance to which shipments to small communities were made, and certainly the average distance to which shipments to municipalities were made, was probably very much less than that suggested by the economists.

This conclusion is borne out by an examination of cost reports of pipe arch culverts which were filed as part of Exhibit H-26 on behalf of Pedlar. It was stated that Pedlar continued to manufacture pipe arch culverts in order to be able to offer a full line of metal culvert products, so it may be assumed that the pattern of distribution of pipe arch culverts would be parallel to the general pattern of distribution of culvert products by Pedlar. An examination of 118 cost records included in Exhibit H-26 reveals that 90 cover sales to counties, townships or

Rough Average Current Cost per Ton to Ship Corrugated Metal Pipe Representative Distances in Ontario - Compiled by Mr. Lloyd, Armco Drainage and Metal Products of Canada, Ltd., with Equivalent Rates per Cwt.

Table 8

From Toronto to:	Guelph (49 miles)		White River (561 miles)		North Bay (228 miles)		Cornwall (266 miles)		Sarnia (179 miles)		Peterborough (92 miles)	
	L. C. L.	C. L.	L. C. L.	C. L.	L. C. L.	C. L.	L. C. L.	C. L.	L. C. L.	C. L.	L. C. L.	C. L.
12"												
Cost per ton	\$14.74	\$7.75	\$51.79	\$27.40	\$28.92	\$15.50	\$32.32	\$17.20	\$25.51	\$13.42	\$18.14	\$9.64
Rate per cwt.	.74	.39	2.59	1.37	1.45	.78	1.62	.86	1.28	.67	.91	.48
18"												
Cost per ton	14.83	7.74	51.73	27.35	28.77	15.35	32.25	17.16	25.41	13.42	18.19	9.55
Rate per cwt.	.74	.39	2.59	1.37	1.44	.77	1.61	.86	1.27	.67	.91	.48
24"												
Cost per ton	17.85	7.82	61.22	27.49	34.13	15.48	37.92	17.22	30.10	13.43	21.49	9.64
Rate per cwt.	.89	.39	3.06	1.37	1.71	.77	1.90	.86	1.51	.67	1.07	.48
30"												
Cost per ton	26.56	7.74	91.07	27.26	50.75	15.30	56.45	17.09	44.80	13.31	31.94	9.54
Rate per cwt.	1.33	.39	4.55	1.36	2.54	.77	2.82	.85	2.24	.67	1.60	.48
36"												
Cost per ton	26.75	7.80	91.72	27.46	51.13	15.44	56.82	17.24	45.08	13.42	32.17	9.63
Rate per cwt.	1.34	.39	4.59	1.37	2.56	.77	2.84	.86	2.25	.67	1.61	.48
42"												
Cost per ton	27.09	7.92	92.86	27.78	51.74	15.64	57.55	17.46	45.67	13.60	32.57	9.73
Rate per cwt.	1.35	.40	4.64	1.39	2.59	.78	2.88	.87	2.28	.68	1.63	.49
48"												
Cost per ton	26.31	7.68	90.17	27.01	50.27	15.18	55.88	16.96	44.35	13.20	31.64	9.46
Rate per cwt.	1.32	.38	4.51	1.35	2.51	.76	2.79	.85	2.22	.66	1.58	.47
60"												
Cost per ton	26.42	7.72	90.59	27.13	50.49	15.24	56.12	17.03	44.55	13.27	31.77	9.50
Rate per cwt.	1.32	.39	4.53	1.36	2.52	.76	2.81	.85	2.23	.66	1.59	.48
72"												
Cost per ton	25.56	7.76	91.04	27.26	50.75	15.32	56.41	17.11	44.77	13.32	31.94	9.55
Rate per cwt.	1.33	.39	4.55	1.36	2.54	.77	2.82	.86	2.24	.67	1.60	.48

Source: Exhibit H-21, p. 41.

municipalities and 25 cover sales to contractors or dealers. Among the latter are some sales which appear to have been made to contractors engaged on federal airport construction. A break-down of these 118 shipments according to distance of destination from the Oshawa plant of Pedlar shows that 51 were made to localities within a radius of 75 miles and a further 26 were within a radius of 125 miles of Oshawa.

Transfer of income, in so far as it can be said to result from delivered pricing, is from places near the manufacturers' plants to places farther away, regardless of size or wealth, all being within the same price area. The Commission is of the opinion that most of the shipments to small communities to which the income transfer argument can be applied, were to places not very far from the manufacturers' plants, places in Southern Ontario. It cannot be said that there is definitely an economic gain in discriminating against these small communities in favour of large or small communities farther from the plant, and, on general economic grounds, such discrimination, in view of the heavy transportation costs relative to the price of corrugated pipe, would be held to constitute definite detriment to communities large and small situated near a metal culvert factory.

One further point with respect to carload shipments deserves mention. At the beginning of 1955, the provincial government L. C. L. prices in Ontario were abolished and all shipments to the provincial government were made at carload prices. Prices to other classes of purchasers were then based on the new provincial government prices. This being so, from the beginning of 1955, there would seem to have been no inducement to purchasers to endeavour to arrange their purchases so that shipments could be made to them in carload lots. It seems to the Commission more than likely that in fact even fewer shipments proportionately have been made at carload rates since the beginning of 1955 than formerly. This can only mean some additional burden upon the purchaser as the manufacturers must naturally seek to recoup themselves for any additional expenses occasioned by such a development.

We have seen that the system of delivered pricing established in the metal culvert industry provides no incentive for the placing of orders so as to effect the most economical use of transportation resources or of productive facilities. Under the present system a purchaser who places an order for a single piece of pipe is offered the same price as a purchaser who places an order for a carload. The Sales Manager of Pedlar testified that "shipments are very often single pipe" (Evidence, p. 172). In addition to the detrimental features already mentioned the delivered price system used in the metal culvert industry increases the transportation charges borne by purchasers in another way. Because of the fact that the same price is used by all members of the industry regardless of the distance the metal culvert has to be delivered from the factory the prospective purchaser is not offered any inducement to look for culverts which could be shipped at the lowest cost in view of his location in relation

to the producing centres. While culvert manufacturers, on the other hand, are keenly aware that the further their products have to be shipped the smaller the net return at the plant, after paying transportation costs, the fact that a province-wide price is offered encourages wide distribution. This is indicated by the following evidence given by the General Manager of Canada Culvert:

"Q. Would there be any case in which you would not accept a very small order from a point far distant from your plant?

A. No.

Q. You would take a small order even if it involved shipping it a great distance?

A. Yes."

(Evidence, p. 107)

As has already been pointed out, transportation costs form a significant proportion of the delivered price of metal culverts and on shipments to distant points in a price zone may amount to as much as 18 to 20 per cent of the price charged the customer. To the extent that the delivered price system leads to the sale of products by one factory in a locality which could be served more economically by a factory closer to the point of delivery there is an uneconomic use of transportation resources and an increase in the transportation costs of the industry which must be borne by culvert users.

It is not possible from the evidence in the inquiry to arrive at any measure of the degree of overlapping of delivery areas of the various culvert plants or what was referred to during the argument as cross-hauling, that is, the transportation of culverts from one plant into localities in the vicinity of another plant. It is possible, however, from the cost records of pipe arch in Exhibit H-26 to determine the distribution of this product by Pedlar in the limited instances shown in the exhibit. Oshawa is situated on Lake Ontario, consequently shipments from the Oshawa plant of Pedlar move east, north, and west. As shipments are made to the west and, to some extent, to the north they move into areas which are situated nearer to other culvert plants. It may be recalled that in addition to Oshawa there are culvert plants in Ontario at Toronto, Hamilton, Guelph, Stratford and London. These cities are, respectively, approximately, 34 miles, 73 miles, 82 miles, 122 miles and 155 miles west of Oshawa by railway. The distribution of 118 shipments of pipe arch culverts included in Exhibit H-26 grouped according to distance and direction of destination from Oshawa is shown in Table 9.

Table 9

Distribution of Pedlar Pipe Arch Invoices According  
to Distance of Destination from Factory

Miles	Direction from Factory			Totals
	East	North	West	
0 - 24	-	5	-	5
25 - 49	9	3	5	17
50 - 74	4	13	12	29
75 - 99	2	3	3	8
100 - 124	5	4	9	18
125 - 149	-	1	5	6
150 - 174	-	2	11	13
175 - 199	-	-	2	2
200 - 224	1	-	-	1
225 - 249	11	2	-	13
250 - 299	3	-	-	3
300 - 399	2	-	-	2
400 -	-	1	-	1
Totals	37	34	47	118

Source: Exhibit H-26.

It will be seen from Table 9 that 47 of the 118 shipments, or approximately 40 per cent, were destined to places west of Oshawa and all were carried distances of more than 24 miles. It must be concluded that shipments to a substantial extent were made to localities which were in closer proximity to other centres of metal culvert manufacture than to Oshawa. In other words, that more transportation was involved in making deliveries from Oshawa than would have been involved if the shipment had been made from the metal culvert plant nearest to the destination. In view of the evidence already referred to it must also be concluded that the situation was not unique for Pedlar but prevailed to a greater or less extent for all metal culvert manufacturers. The effect of such cross-hauling or cross-shipments is to increase the total transportation costs of the metal culvert industry and thus to increase the amount which must be included in the prices of metal culverts to cover transportation expenses. The result is that not only do metal culvert users located near to manufacturing centres have to pay part of the cost of transporting metal culverts to districts farther away from the plants, but users in both near-by and distant communities are required to pay larger transportation costs than would be the case if transportation was based on the most economical pattern of distribution.

(c) Submissions Comparing Certain Aspects of the Metal Culvert Industry in the United States and Canada

Among the statistical material contained in Exhibit H-21 are a number of charts and tables comparing certain costs and prices in the United States and Canada, which in Mr. Wolfe's opinion showed that between August 1948 and August 1955 the following things had occurred:

- (i) The price of metal culverts had increased in the United States and Canada by about the same percentage, viz., 30.
- (ii) The price in Canada of the basic material, galvanized steel sheets, had increased by a substantially greater percentage.
- (iii) Wages in Canada in the culvert industry had increased by a much greater percentage than in the United States.
- (iv) Gross margins (of Armco only) on metal culverts, in the years 1948 and 1955 had not differed markedly in the two countries, but during most of the period between 1948 and 1955 gross margins of the Canadian Armco had usually been lower than those of the American Armco, and
- (v) Net profits (before taxes) of the Canadian Armco down to the end of 1953 had been somewhat higher than the net profits of Armco Steel Corporation in the United States, but this net profit position had been reversed for the years 1954 and 1955. On the whole the net profit pictures were roughly the same for the two companies.

Based on this interpretation of the material Mr. Wolfe drew two conclusions:

- (1) Productive efficiency in Canadian Armco had increased much more rapidly than in the American Armco Drainage and Metal Products Inc.
- (2) Assuming free competition in the United States, it did not appear that very much advantage had been taken of the alleged combine in Canada to increase Canadian profits. This conclusion was also based on figures which showed that Canadian Armco's gross profit margin on some of its products, about which no allegation of collusive arrangement had been made in this inquiry, had been higher than that of American Armco Drainage on the same products.

In the Commission's view no definite conclusions can safely be drawn from the statistical evidence referred to. In the first place the chart showing the increase in price of galvanized steel sheets appears to be based, unfortunately, not on a price series for culvert steel sheets, but on a price series for lighter gauge sheets used for other purposes. On pages 293 and 294 of the Statement of Evidence is a table obtained from The Steel Co. of Canada showing their prices per hundred pounds for one weight of culvert sheets, viz., 12 gauge, 27 1/2" wide delivered to various cities in Canada, with the price changes that have occurred from April 1, 1946 to November 1, 1955. The Commission considers this would have been a more appropriate price series to compare with that of metal culverts. There is no reason to doubt its accuracy, and though limited to one culvert weight only, it must surely give a truer picture than the other price series. From the table in the Statement of Evidence part of Table 10 has been prepared, showing all price changes on shipments to Guelph (Armco's chief plant) from August 1, 1948 to November 1, 1955, with an index representing the prices at August 1, 1948 as 100 and showing all percentage price changes subsequent to that date. The balance of Table 10 is based on the data in Exhibit H-21, the first three items being corrected from a less than carload to carload level, and shows a corresponding table of prices per foot and index of percentage price changes during the same period for 36" 12 gauge plain galvanized corrugated metal pipe to the government of Ontario.

Table 10

Comparison of Prices and Price Indexes, Copper Bearing Culvert Sheets and Plain Galvanized Corrugated Metal Pipe, to the Government of Ontario, August 1948 to August 1955

Copper Bearing Culvert Sheets, De- 36"/12 ga. Plain Galvanized Corrugated Metal Pipe to the Government of Ontario

Date	Price	Index	Date	C. L. Price	Index
	\$			\$	
August 1, 1948	6.17	100.0	August 5, 1948	6.16 <sup>(2)</sup>	100.0
November 15, 1948	6.47	104.9			
January 1, 1949	6.69	108.4	January 1, 1949	6.41 <sup>(3)</sup>	104.0
March 28, 1949	6.59	106.8			
May 19, 1949	6.44	104.4	May 26, 1949	6.21 <sup>(4)</sup>	100.8
July 4, 1949	6.14	99.5			
October 11, 1949	6.14	99.5			
November 16, 1949	6.29	101.9			
January 1, 1950	6.29	101.9	January 1950	6.63 <sup>(5)</sup>	107.6
March 23, 1950	6.29	101.9			
May 10, 1950	6.44	104.4			
June 16, 1950	6.44	104.4			
July 1, 1950	6.64	107.6			
September 1, 1950	6.89	111.7			
November 6, 1950	7.14	115.7			
January 1, 1951	6.99	113.3	January 1951	7.67 <sup>(5)</sup>	124.5
January 31, 1951	7.24	117.3	February 1951	7.90 <sup>(5)</sup>	128.2
July 26, 1951	7.24	117.3			
August 13, 1951	7.24	117.3			
October 17, 1951	7.39	119.8			
January 15, 1952	7.39	119.8	January 1952	7.98 <sup>(5)</sup>	129.5
March 1, 1952	7.39	119.8			
April 1, 1952	7.29	118.2			
October 1, 1952	7.29	118.2			
January 1, 1953	7.29	118.2	January 1953	7.98 <sup>(5)</sup>	129.5
March 16, 1953	7.29	118.2			
May 1, 1953	7.29	118.2			
January 7, 1954	7.35 <sup>1</sup>	119.2	January 1954	7.98 <sup>(5)</sup>	129.5
April 1, 1954	7.35 <sup>2</sup>	119.2			
June 1, 1954	7.42 <sup>1</sup>	120.3	December 1954	7.98 <sup>(5)</sup>	129.5
February 1, 1955	7.39	119.8			
April 18, 1955	7.18	116.4			
August 15, 1955	7.38	119.6	August 1955	8.30 <sup>(5)</sup>	134.7
November 1, 1955	7.38	119.6			

- Sources: (1) Letter and attachments from The Steel Company of Canada, Limited to the Director of Investigation and Research, dated February 22, 1956.  
 (2) Serial 6774 (3) Serial 6777 (4) Serial 6914  
 (5) Exhibit H-21, p. 42.

Table 10 shows that while the percentage price increase of the 36" culvert during this period was nearly 35 per cent, the increase in 12 gauge culvert sheets, instead of being substantially greater, was only about 20 per cent.

In the second place the Commission has no evidence as to whether the markets in the United States for culverts or for other products referred to are markets in which free competition prevails or are subject to some degree of control, with or without collusion. We do not think any assumption should be made on this point.

In the third place we do not think that a comparison of the net profits of Armco Steel Corporation (a large integrated steel company) with those of the Canadian Armco Drainage is very helpful.

In the fourth place, while the Armco companies are the leading metal culvert manufacturers in both the United States and Canada, the Commission does not think it safe to reach conclusions on the basis of figures respecting the gross profit margins of only one culvert company in each country.

Finally, conditions in the industry in the two countries during the period of comparison may have differed in many respects, e.g., much more rapid percentage growth in Canada. Similarly, conditions affecting demand and supply as between culverts and other products may have differed widely in the two countries. Such variations might affect substantially the gross profit margins obtained on the several products. We have no evidence concerning these matters.

(d) Comparison of Gross Profit Margin in British Columbia with that in Other Provinces

An interesting point in regard to the delivered pricing system was raised by Mr. Wolfe in discussing a chart in Exhibit H-21 showing the relative gross margins on culvert sales over a period of years for the several Armco branches in Canada.

This chart, or rather group of charts, shows the gross profit margin on metal culverts obtained by Armco during the years 1946 to 1955 in the following provinces: British Columbia, Alberta, Saskatchewan, Manitoba, Ontario and Quebec. The graph for British Columbia is superimposed as a broken line on the charts for each of the other provinces. It will be remembered that in British Columbia sales are made on a f.o.b. plant basis, while in all other provinces sales are on a delivered price basis. These charts show that in Quebec and Saskatchewan the gross margin has been continuously lower than in British Columbia, in Manitoba it has generally been higher than in British Columbia, while in Ontario and Alberta it has fluctuated above and below the British Columbia level. Owing to difficulty of reproduction the group of charts is not included in the report but Table 11 gives figures approximating those from which the charts were made.

Table 11

Gross Profits as Percentage of Culvert Sales, Armco  
Drainage and Metal Products of Canada, Ltd.,  
by Provinces, 1946-1955

	British Columbia	Ontario	Manitoba	Saskatchewan	Alberta	Quebec
	%	%	%	%	%	%
1946	36.5	38.0	44.0	34.0	40.0	-
1947	30.5	34.0	35.0	26.0	34.0	30.0
1948	26.0	27.5	32.0	24.0	29.0	23.0
1949	26.0	17.5	30.0	19.0	25.5	12.0
1950	24.0	22.0	25.0	21.0	17.5	21.0
1951	30.5	34.0	30.5	24.0	25.0	28.0
1952	34.0	32.0	34.0	28.0	33.0	29.0
1953	31.0	30.0	32.0	26.0	32.0	30.0
1954	27.0	30.5	29.0	21.5	28.0	20.5
1955	28.0	26.0	26.0	20.0	29.5	19.0

Source: Based on reading of chart, Exhibit H-21, p. 38.

Mr. Wolfe interpreted these graphs as showing that the delivered pricing system had produced less by way of return than its cost in almost all provinces in which it was used, and that no perceptible advantage had been gained by using a delivered pricing system as compared with the f.o.b. system in British Columbia.

In the Commission's view not very much that is of importance in this inquiry may be deduced with accuracy from the graphs of gross profit margins. In the only two provinces where the gross profit margin suffers by comparison with the f.o.b. province of British Columbia, circumstances peculiar to the province may well have been decisive. The evidence indicates that in Quebec there is a large number of concrete pipe plants, and only one or two metal culvert plants, also that there is a strong tendency in that province in the purchase of culvert materials to favour local manufacturers to the largest extent possible. This suggests that concrete manufacturers have an advantage over metal culvert manufacturers in Quebec, a conclusion supported by the fact that the production of metal culverts in Quebec reported to the Dominion Bureau of Statistics forms only 3 or 4 per cent of Canadian production, which contrasts sharply with the relative population of the province. Under such circumstances it could be expected, as Mr. Wolfe suggested, that metal culvert manufacturers would accept a lower margin in an effort to secure a larger share of the total culvert business. The position in Saskatchewan is not quite so clear but the evidence is that there is a number of concrete and concrete pipe plants in that province, some of which are quite large, and that

they have been securing a very substantial share of the total culvert business. This may have had much more significance than anything else in determining the price level and thus the gross profit margin on metal culverts.

(e) Pricing Policy and Examples of Alleged Higher Prices Resulting from Price Agreement

We have found that by means of discussion and agreement uniform prices have been established in the metal culvert industry, and have been generally maintained by the manufacturers. There is, however, no evidence that the manufacturers have sought to maximize their short-term profit by charging the highest prices at which their total production could have been sold. It is quite likely that during fairly lengthy periods of shortage in the supply of culvert steel, after the end of wartime price controls, somewhat higher prices than were charged would not have produced unsaleable surpluses. Other factors, such as the possibility of reimposition of government price controls, may have had some influence in establishing moderation in price policy, but the Commission believes the main cause of price moderation lay in the manufacturers' long-range view of the industry and their efforts to expand and develop the market over a period of years. Armco's influence in favour of this long-range policy has been particularly marked. Obviously, efforts to persuade regular buyers of culverts that steel pipe would serve their purposes better and more economically than culverts of concrete, wood or tile would not be assisted by charging "all the traffic would bear". It must also be remembered that while Canadian metal culvert prices have been below the duty-paid cost of imported metal culverts the margins, in many cases, were not very wide so that a considerable divergence in an upward direction from price movements in the United States would have increased the possibility of importations even without any reduction in import duties.

However, the fact that moderation was exercised in setting the price level does not eliminate the possibility of public detriment. In general, even where restraint is used, prices arrived at by agreement among sellers tend to be higher than under price competition. In particular cases special circumstances may prevent this result, but the danger is always present. The Director contends that evidence on several specific matters indicates prices have been higher than would have been the case without price agreement.

(i) Arbitrary Price Changes Made to Meet Wishes of Others.

Prices were sometimes raised when not desired by all the manufacturers concerned. In at least one instance prices were raised at a time when Armco thought no change should be made, as appears from a letter from Mr. E. R. Howes to Mr. E. L. Campbell dated September 20, 1950. The first three paragraphs read as follows:

"There was a meeting of the Culvert Council yesterday. called at the request of Mr. Buell of the Roofers Supply, as both he and Richardson were in town attending the Canadian Good Roads Convention.

After discussing various phases of the culvert business, the question of price increases came up. I did not want to see prices increased at this time as it is very likely an increase will be made in the basic prices of steel and not skull [sic] fluctuations due to the gyrations of the zinc market, such as we have been having. Also undoubtedly there will be a substantial increase in freight rates. I tried to get the matter held over for another month to see what would come out of the negotiations between the railways and their labor, as well as their efforts to get further freight increases.

The point which eventually decided the majority to increase prices at this time was the probability that price controls might go into effect at any time and, if so our prices would be stabilized yet we would have to pay the \$5.00 per ton increase which the Steel Company recently put into effect, as well as some possible small freight rate increases. After a long drawnout discussion they decided that a 5% increase should be put into effect on October 1st."

(Serial 6141)

Questioned about this letter Mr. Howes stated that he did not think he was opposed to the increase, but apparently wanted to delay it. It may be noted that a similar increase had just been put into effect in Eastern Canada, without opposition from Armco. In view of Armco's position as the largest producer, it is reasonable to assume that if Armco had not modified its stand, no price increase would have occurred at that time.

A similar situation involving Westeel occurred three or four months earlier. At a western meeting on June 1, 1950, Westeel apparently opposed any increase, while Richardson wanted 5 per cent. A compromise at 2 per cent was reached. It is probable that increasing costs at that time would have led to an increase very soon, but it appears that Westeel was persuaded by the other manufacturers to agree to an increase at a time when, in its individual judgment, no increase should have been made.

The Commission considers that these two examples indicate that Armco's and Westeel's consents to raise prices were obtained on an arbitrary rather than an economic basis related to their actual costs, though the evidence is not completely clear. In an earlier instance, however, the arbitrary character of a decision on prices is

clear. This instance has already been mentioned in Chapter IV. In April 1946 a price increase amounting to some \$12.50 per ton was put into effect in Eastern Canada. In the West a meeting failed to agree on the date for the increase to become effective, because at least one company had orders booked which it wanted to deliver at the old prices. As a result no increase was made and for quite a period western prices were out of line with eastern prices. Quite clearly neither the western decision not to increase prices nor the long-continued variation with eastern prices resulted from the automatic operation of market forces. They resulted simply from disagreement between the representatives of Armco and Westeel and were essentially arbitrary in character. In this instance, of course, the result was that prices were not increased.

(ii) Pipe Arch Prices

What is involved under this heading is the difference between the price for round pipe and the price for pipe arch made from the round. It is sometimes referred to as the arching extra. Reference has already been made to this matter when considering whether uniform prices had resulted from price leadership or from agreement. We return to it because of the Director's allegation that the price of pipe arch "was kept high at the insistence of firms who had to manufacture it by high cost methods rather than by the simpler and cheaper method available to Armco."

The evidence relating to this allegation is found chiefly in correspondence between Armco officials early in 1952. At that time Mr. Elder (Armco, Vancouver) sought to change the basis of pricing pipe arch and coated pipe in British Columbia. In a letter to Mr. E. R. Howes (Armco, Winnipeg), dated January 8, 1952, Mr. Elder stated that he and Mr. Styan (Westeel, Vancouver) felt they should tie their pricing with the coating extras which had been established for pipe and pipe arches for the three Prairie Provinces. They proposed that the British Columbia coating and arching prices should be the Prairie Provinces prices plus 10 per cent, the 10 per cent being desired to cover the higher wage costs in British Columbia. A copy of the letter was sent to Mr. E. L. Campbell (Armco, Guelph), who apparently asked Mr. H. M. Lloyd (also of Armco, Guelph) for his comments.

Mr. Howes did not agree with Mr. Elder's proposal. He replied on January 10, 1952, one paragraph reading as follows:

"2nd. Arching Extra:

According to the schedule just sent you, you will get 80¢ per foot for arching a 30" 14 gauge pipe, and for arching a 20-foot length \$16.00. You surely can make enough money, and sell arched pipe, on this basis. If you get it too high it will reduce the sale of pipe arches and possibly encourage some of your opposition to build machines to make it properly."

(Serial 4258)

Mr. Elder replied, again urging the adoption of his proposals. Mr. Howes again replied, under date of January 25, 1952, his letter reading in part, as follows:

"Your proposed prices, which you attached, for pipe arches I think will result in that you will have a price list but that the sales of arches will not be very substantial. I feel that the prices in our printed schedule are plenty high enough. Take for instance - a 36" pipe in 14 gauge is selling at \$7.13 per foot F. O. B. Vancouver to the Provincial Government and by the time you arch it and fully coat it you have a price of \$11.00, roughly a 60% increase for deforming the pipe and putting some asphalt on it.

Look at it another way - take a 36" pipe 20 feet long, you would receive \$24.60 merely for arching it. Two men half-asleep could arch 20 feet of 36" pipe in well under an hour. When this figure is added on to the round pipe price, which already has a good profit in it, then the coating charge, you are just pricing yourself out of the market."

(Serial 2748)

Similarly, Mr. Lloyd did not agree with Mr. Elder. On January 29, 1952 Mr. Loyd wrote Mr. Elder, as follows:

"I have been following the correspondence which you have had with Ed Howes on pricing coated and arched pipe. Without in any way intending to comment on the price policy in British Columbia which you are familiar with and I am not familiar with, I thought that you might be interested to know that we consider our pipe-arch extras on the high side in the East.

When the last full review of prices was made late in '49 and at the beginning of 1950, the pipe-arch extras which we proposed were not acceptable to those who make their pipe-arches on the forming rolls. They wanted a considerably higher price and we agreed to a compromise which became the Eastern base price. The Prairies have accepted this price with some percentage increase on it. Since January 1950 as you know the price of culverts has been increased regularly pretty well in the ratio to Canadian steel price increases. I believe myself that this increase in steel pricing has been much more substantial percentagewise than the increase of the various costs which go into arching pipe. These two factors -- high base price in 1950 and the high increases do make our pipe-arch prices higher than necessary to maintain our average culvert pipe profit.

I am passing this information on to you just as a matter of record."

(Serial 4259)

Mr. E. L. Campbell was asked if the selling prices of pipe arch as published by his company were kept higher than necessary because of the desires of competitors, with particular reference to the period from 1949 to 1952. He stated that their prices probably had not been as low as they might have been. Armco developed a process, which was patented, for producing pipe arch from round pipe. Other manufacturers then began to produce pipe arch by fabricating it in this form, presumably at a higher cost than that involved in the patented Armco process. To produce pipe arch equivalent in size to round pipe takes less metal but more work. Pipe arch carries more water than a round pipe of a diameter equal to the pipe arch span. In the beginning and for a long time prices of pipe arch were not based on cost but on its value in comparison with round pipe. In that sense Armco's pipe arch prices may have been higher than necessary. Mr. Campbell did not specifically recall compromising with competitors on pipe arch prices in 1949-50 (see Evidence, pp. 419-21).

Other letters in this Armco correspondence support Mr. Lloyd's comments concerning pipe arch prices. A letter from Mr. Howes to Mr. Elder dated April 17, 1952 contains this as its last paragraph:

"I am sending copy of this letter to Ed Campbell with a view to the possibility of having an extra charge for arching set up similar to our extra charge for dipping. This, of course, will have to wait until their Annual Meeting in the East this fall. I understand that at the time of the original set-up for arching prices in the East that they were set up on the basis of higher costs of member companies for arching due to their method of forming the arches on the rolls, and that the actual differential that we now have in force all across Canada is too high."

(Serial 4524)

Again in January 1953 Mr. Elder urged that coating and arching prices in British Columbia be set 10 per cent above the Winnipeg or prairie level. Mr. E. L. Campbell agreed, so far as coating extras were concerned, but not for arching. A letter from him to Mr. Elder dated January 26, 1953 contains the following paragraph:

"However, the extra charge for arching a Pipe-Arch should not in my opinion be any different at any of our

plants, since only variations in labour rates are involved, and our extras for pipe arching have been held a bit too high, mainly because of the insistence of our competitors of having it up there, since their method of making pipe arches is much more costly than ours."

(Serial 2769)

Questioned concerning this paragraph Mr. Campbell stated:

"A. I would like to make this comment. Our method of making pipe arch culverts is in a big press in which we produce round pipe and then deform it. Patents cover that procedure. Since we started to build up acceptance for the pipe arch type of culvert pretty much across Canada, most of the other metal pipe manufacturers started to produce a similar product but their method of doing it was to fabricate the pipe arch in this form instead of making a round pipe first and then deforming it, which presumably made their cost higher.

We were in this position, which is reflected in the statement I make in this letter. We wanted to build as wide an acceptance of this type of pipe arch structure as we could among culvert buyers all across Canada. If we adopted the practice, because we happened to have a lower cost method of pushing the price of that down where other companies could not have produced it or would have been discouraged from the use of it, from making it by their method, it would have had the result, well we could say of restricting competition, for one thing, or squeezing it out, which we probably would have done.

But also from our viewpoint it would have eliminated the possibility of other metal pipe makers continuing to try to develop the acceptance for that against concrete. Actually the pushing of that shape of structure -- just to emphasize what its impact can be against concrete -- in Minnesota, where pipe arch was originally started and sold; that was the origin point of Armco pipe arch -- the acceptance of that metal pipe arch was so great that the concrete pipe companies in Minnesota were forced to start making that shape of concrete pipe structure.

So that we see in our trying to develop the greatest acceptance for that pipe arch shape structure with a flat bottom that the water can get through quicker, provides a means of meeting this concrete pipe competition. In order

to accomplish that we were glad to see the other companies trying to produce it and to help us build acceptance for it as against concrete.

If we had adopted the procedure purely cost-wise, as we became aware of costs that we could reduce the price on them to where it would have the effect of probably forcing other metal pipe producers out of the manufacturing and supplying of it, which I think probably would have happened -- I do not doubt but what it would have discouraged them from offering pipe arch at their higher cost -- we were a little reluctant to do that mainly from the standpoint of increased competition in that pipe arch to help in a greater acceptance of it as against concrete.

Q. If your particular concern was to keep your competitors in the field, could you not have licensed such competitors to use your process?

A. We did.

Q. When did you license them?

A. I think in 1954."

(Evidence, pp. 431-3)

Mr. Campbell explained that while pipe arch had been produced in Canada since just prior to World War II, the patents were owned by Armco's parent company in the United States, and that there had been some questions concerning the validity of the patents and whether or not they were being infringed by other companies in Canada. These questions had not been cleared up till 1954. Rosco was licensed for pipe arch in 1954 for the nominal licensing fee of \$500.00 and requests from Pedlar and Westeel for licenses were then (December 1955) being considered. He added:

"... As a matter of fact, I think it is slowed up mainly just through the volume of work to do this fall, but it is our present practice not to restrict our low-cost method to ourselves but to make that available to other companies for the primary purpose of developing greater acceptance for the metal type of structure against concrete. We feel that moving in that direction will help accomplish that rather than to adopt a price policy that would have had the effect undoubtedly of discouraging other metal pipe companies from making them."

(Evidence, p. 436)

Mr. E. R. Howes also stated that Armco wished its competitors to make pipe arch and other Armco developed products and was willing to license them. He said some customers such as the rail-ways and provincial governments like to split their business among manufacturers and might refuse to buy a product made by one firm only. Armco would sell more pipe arch if other companies made it.

Counsel for Armco argued that the company was entitled to the fruits of its patented processes and techniques, that the evidence showed the company had shared these processes and techniques with other metal culvert manufacturers, and that if to a limited extent it had sheltered other manufacturers who made pipe arch by a more cost-ly process, this was in conformity with Armco's policy of metal culvert expansion.

A statistical table was introduced by the economists to show the relative price movements of round pipe and pipe arch. Table 12, reproduced from page 24 of Exhibit H-21, compares the price of pipe arch 36" x 22"/14 gauge with that of round pipe 36"/14 gauge, at several dates from 1939 to 1955. Pipe arch 36" x 22" is made by the Armco process from 30" round pipe. The table shows that the price of pipe arch had not increased between 1939 and 1955 as much as the price of round pipe, indicating that the charge for arching had declined relative-ly to the price of pipe, if not absolutely.

Table 12

Relative Prices of Plain Corrugated Metal Pipe and Pipe Arch, and  
Index of Round Pipe as Compared with Pipe Arch,  
April 1, 1939 to August 23, 1955

	Pipe Arch, Plain Galvanized 36" x 22"/14 Gauge	Round, Plain Galvanized C. M. P. 36"/14 gauge	Cents Dif- ferential Round-Arch	Index of Re- lative Price Round - 100
Aug. 23/55	\$6.48	\$6.96	+ .48	93.1
Dec. 14/54	6.35	6.69	+ .34	94.9
Feb. 1/53	6.63	7.06	+ .43	93.9
Jan. 7/52	6.74	7.06	+ .32	95.5
Jan. 1/51	6.37	-	-	-
Feb. 1/50	5.52	-	-	-
Jan. 2/40	4.31	4.30	- .01	100.2
April 1/39	4.31	4.20	- .11	102.6

Source: Exhibit H-21, p. 24.

In the Commission's opinion, the statements quoted above from letters of Armco officials, to the effect that pipe arch prices had been maintained at a higher level than necessary because of the insistence of competitors who used more costly processes, are very strong. They are not contradicted by other evidence. We can understand Armco's view that their own pipe arch business might be enlarged if other companies also made this product, for it appears likely that government and railway purchasers would prefer a product for which there was more than one source of supply. As a result the total market for pipe arch might be widened considerably. However, such a view does not afford economic justification for keeping Armco's price at a higher level by agreement than would otherwise have been the case, so that other manufacturers could continue to make pipe arch by more costly methods and sell at the same price as Armco. Surely if widening the market for pipe arch was of paramount importance to Armco the logical course would have been to license competitors pretty freely to use the Armco machine and process. It is of some significance that no competing Canadian company was so licensed until 1954, and that when evidence was taken at the end of 1955 requests from two other companies for licensing were being considered but had not been granted. At the hearing in October 1956 no evidence of licences being granted to other companies was submitted. Mr. Campbell's evidence that patent questions had delayed licences in Canada is not specific enough under these circumstances. We have no evidence that Armco was under attack for alleged infringement of other people's patents and there would seem to have been no serious difficulty in the way of licensing other companies prior to 1954, particularly if only a nominal charge was made for the licence. This conclusion is supported by the fact that in the United States, the American Armco, according to the evidence of Mr. M. C. Patton, its Executive Vice-President, licensed three or four companies to manufacture pipe arch as early as 1944 or 1945, and a group of fourteen or fifteen more in 1949 or 1950. The Commission is inclined to the view that either Armco's willingness to license other companies to use its pipe arch machine and process was of fairly recent origin or other companies were not unsatisfied to continue with their own processes.

### (iii) Coated Pipe Prices

The Director made a specific allegation that for some years, by agreement, one price was set for coated pipe, regardless of whether plain galvanized or asbestos bonded steel was used, though asbestos bonded steel is more expensive. He alleged the evidence indicated that the price was based on the cost of the more expensive asbestos bonded steel.

The only evidence tendered by the Director directly supporting this allegation is contained in a Pedlar inter-office memorandum from Mr. J. T. Kellington, Oshawa, to Mr. D. M. Coombs, Montreal, dated March 26, 1954. The first paragraph reads as follows:

"It is quite true that our selling price on asbestos bonded fully asphalt coated paved pipe is the same as the price for galvanized fully coated and paved pipe. My understanding on this is that as Armco people were the originators of the paving and dipping process, that other manufacturers who have dipping facilities are in agreement that they should not undersell asbestos bonded pipe by offering standard galvanized asphalt coated. We believe that the paved and coated pipe price was set up on the basis of using asbestos bonded sheets, and the extra cost of these is included."

(Serial 7289)

At that time Pedlar was using asbestos bonded steel (an Armco patented product) in the manufacture of culverts. No other Canadian company was then using it apart from Armco. Mr. Kellington is Pedlar's Sales Manager in charge of production as well as sales, and the Director submitted that he knew the facts and that his statement could be accepted as being reasonably accurate.

Counsel for the Director also referred to some indirect evidence which might be interpreted as supporting Mr. Kellington's statements. It is clear from evidence referred to earlier in this report that for some time Westeel's Manitoba Manager tried to establish prices for galvanized coated or coated and paved pipe half way between plain galvanized pipe and asbestos bonded coated or coated and paved pipe. By 1950 the price lists for both Eastern and Western Canada had eliminated all reference to asbestos bonded pipe, and showed only one price for any kind of coating and only one price for any kind of coating plus paving. One letter, in addition to those referred to earlier, may have some significance in this connection. On April 20, 1950, Mr. E. R. Howes (Armco, Winnipeg) wrote to Mr. E. C. Elder (Armco, Vancouver), the first two paragraphs reading as follows:

"In talking to McAuley of Westeel he brought up the question of coated pipe in B.C. No doubt this question was brought about by the specifications of the P.G.E. Railway and their calling for tenders.

Some years ago, when we were setting prices for coated pipe, Mac thought that there should be a separate price for painted or coated pipe, as well as Asbestos Bonded Coated Pipe, and suggested that a halfway mark be used, that is halfway between ordinary steel and what we term Asbestos Bonded Coated pipe. We never agreed to this, although I found out from Mac today that he had submitted a price list to Styan on plain steel pipe coated which was halfway between plain steel and our schedule list on Asbestos Bonded Coated pipe. I told him that this was not in any schedule and that the Eastern schedule just

shows coated pipe and that any firm can use what base they want underneath the coating."

(Serial 4447)

Obviously these paragraphs indicate that what Westeel wanted was to set a price for galvanized coated pipe that was lower than the current published price for asbestos bonded coated pipe rather than to establish the differential by raising the price of the asbestos bonded product. However, as the Director's counsel himself pointed out, Westeel's proposal does not necessarily support Mr. Kellington's statement. It may mean that the price of galvanized coated pipe had previously been raised to that of asbestos bonded, and that as it was cheaper to produce, a satisfactory profit could still be secured if its price was reduced as proposed. On the other hand it may mean that as asbestos bonded coated pipe was generally regarded as superior to galvanized coated, and as Westeel did not use asbestos bonded, they would have to cut the price of galvanized coated and therefore their profit, if they were to compete successfully in the coated pipe field. It appears likely that the proposal was intended to be permanent, and it is therefore reasonable to assume that Westeel would not have made it unless they expected that some profit would be obtained on sales made at the lower price, but it cannot be assumed that Westeel expected to make what they would regard as a normal profit. In the Commission's opinion this indirect evidence is inconclusive.

In answer to the Director's allegation Mr. Bain and Mr. Wolfe submitted Table 13, reproduced here from page 22 of Exhibit H-21.

Table 13

Price Structure, Round Corrugated Metal Pipe, U.S.A. & Canada (36"/12 ga., U.S. County and Canadian Municipal)			
	<u>Plain</u>	<u>Asphalt Coated and Paved</u>	<u>Asbestos Bonded Pav- ed and Fully Coated</u>
<u>February, 1947</u>			
U.S.A.	100.0	144.4	144.4
Canada	100.0	124.9	124.9
<u>August, 1948</u>			
U.S.A.	100.0	127.1	137.3
Canada	100.0	124.9	124.9
<u>December, 1954</u>			
U.S.A.	100.0	110.8	140.1
Canada	100.0	125.7	125.7
<u>August, 1955</u>			
U.S.A.	100.0	110.0	138.7
Canada	100.0	125.7	130.5

Source: Prices to Municipal Governments; Price list Armco, Guelph

Price lists from Central Division, Armco Drainage and Metal Products, Inc., Middletown, Ohio, October 15, 1956. Prices are those to Counties and Townships except in 1954 and 1955 where State Prices have been used. These prices are lower than County prices but the price structure is similar.

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Source: Exhibit H-21, p. 22.

This table is based on prices obtained from Armco's price lists at Middletown in the United States and Armco's price lists at Guelph in Canada. It gives the figure 100 to represent the price of plain round galvanized corrugated metal pipe in the United States and Canada at four dates, one in each of the years 1947, 1948, 1954 and 1955. It then shows for each of those dates, the prices in the United States and Canada, of asphalt coated and paved pipe and asbestos bonded paved and fully coated pipe expressed as a percentage of the price of plain pipe.

The table shows that in February 1947 the American prices for asphalt coated and paved pipe and for asbestos bonded paved and fully coated pipe were identical and were 44.4 per cent above the American price for plain galvanized pipe. On the same date the Canadian prices for asphalt coated and paved pipe and for asbestos bonded paved and fully coated pipe were also identical but were only 24.9 per cent above the Canadian price for plain galvanized pipe. In August 1948 the American prices for the two kinds of coated pipe were no longer identical. The differential over plain pipe had dropped in both cases, but for asphalt coated and paved pipe it had dropped all the way from 44.4 per cent to 27.1 per cent, while for asbestos bonded paved and fully coated pipe it had only dropped to 37.3 per cent. The Canadian differential for both kinds of coated pipe remained 24.9 per cent above plain pipe.

In December 1954 the American differential on asphalt coated and paved pipe had dropped to 10.8 per cent while that on asbestos bonded had risen slightly to 40.1 per cent. At that date the Canadian differentials on both kinds of coated pipe were still identical but had risen slightly to 25.7 per cent.

In August 1955 the American differential on asphalt coated and paved pipe had dropped to an even 10 per cent, while that on asbestos bonded had dropped to 38.7 per cent. On that date there appears for the first time a difference in the Canadian differentials, that for asphalt coated and paved remaining at 25.7 per cent, that for asbestos bonded rising to 30.5 per cent.

Mr. Wolfe submitted that these figures, at least for the period 1948 to 1954, afforded pretty good evidence that on the whole asbestos bonded pipe was priced down to the price of products made without asbestos bonded metal, rather than the reverse, as alleged by the Director.

The Commission does not agree. We are of the opinion that the figures afford no solid base for either conclusion. In the first place, the table starts with the year 1947 and we have no information as to the situation before and just after asbestos bonded steel was developed in 1934. This fact was mentioned by Mr. Wolfe himself, and the Commission feels that it renders the table of very uncertain value. We do not know what fluctuations occurred between 1933 and 1935 nor between

1935 and 1947. We do not know why in 1947 the American differential on asphalt coated and paved pipe was 44.4 per cent above plain pipe, while the Canadian differential was only 24.9 per cent nor why, between that year and 1955 the American differential dropped to a remarkable extent, to 10 per cent. In that period the American differential on asbestos bonded was fairly stable and the Canadian differentials on both kinds of coated pipe were very stable indeed.

Even if we were to disregard the weaknesses inherent in such incomplete information, the conclusions which might be drawn from a study of the table would be contradictory. It might be argued that the American differential of 44.4 per cent in 1947, compared with the Canadian differential of 24.9 per cent indicated that in the United States asphalt coated and paved prices had been kept up to those for asbestos bonded but that this did not apply in Canada. The drop in the next year in the American differential on asphalt coated and paved pipe to 27.1 per cent, only slightly above the Canadian differential of 24.9 per cent on both kinds of coated pipe, would support this argument, and even support the argument that the Canadian price of asbestos bonded had been kept down to that of asphalt coated and paved. This last argument, however, depends on an assumption that in 1948 the American and Canadian differentials on asphalt coated and paved pipe had become nearly equal for similar reasons, another matter about which we have no information.

Then if we look at 1954, we find that the American differential on asphalt coated and paved pipe had dropped to 10.8 per cent, well below the Canadian level of 25.7 per cent. If we again disregard the very incomplete nature of the evidence, it might be argued that the Canadian differential on asphalt coated and paved pipe was much too high and was in fact being kept up to that of asbestos bonded.

For the foregoing reasons we consider that the figures in Table 13 do not clarify the situation. On the whole question of the relationship between the prices of asphalt coated and paved pipe and those of asbestos bonded, the evidence as a whole does not justify a finding that the Director's allegation has been proved.

There is, however, another aspect of the pricing of asphalt treated pipe which is deserving of comment. It has already been mentioned, in commenting on Table 13, that the American differential between plain galvanized and treated galvanized pipe has been greatly narrowed in recent years, whereas the differential in Canada has been increased. This divergence between American and Canadian prices becomes even more apparent when a comparison is made of the price differential according to size of pipe.

Table 14

Differentials Between Township and Municipal Prices of  
Plain and Asphalt Treated Pipe, Middletown,  
Ohio and Ontario, 1955

Size of Pipe	Middletown, Ohio Increase in Price Over Plain Pipe			Ontario Increase in Price Over Plain Pipe		
	Coated Pipe*	Paved and Coated Pipe	Asbestos Bonded Paved and Coated Pipe	Coated Pipe	Paved and Coated Pipe	Asbestos Bonded Paved and Coated Pipe
	\$	\$	\$	\$	\$	\$
18"	.36	.80	1.26	.49	1.02	1.17
36"	.72	1.60	3.09	1.28	2.48	2.94
72"	1.44	3.19	7.24	3.90	6.27	7.52

\*Differentials for coated pipe are based on State Government prices which were stated to have a similar price structure to Township prices.

Sources: American Prices, Exhibit H-21, p. 23.  
Canadian Prices, Exhibit H-6.

It will be noted that in the case of galvanized pipe the American price differentials between plain and treated pipe increase in most cases directly with the area of the treated pipe. The surface to be treated for a 36" pipe is twice that for a pipe of 18" and the additional price above that of plain pipe is also twice as great. The same relationship holds for 72" pipe on the State Government price list but on the County and Township price list for paved and coated pipe the increase is somewhat greater. Under the Canadian price structure no such relationship between surface to be treated and additional price for treated pipe is shown. In the case of coated pipe the additional price for coating a 72" pipe is more than seven times greater than for a pipe of 18" although the surface is only four times as large. Advances in prices of somewhat similar magnitude are also apparent in the price differential for paved and coated pipe. The result is that the additional prices in Ontario for treated pipe in the medium and larger sizes

are from 50 per cent to perhaps more than 100 per cent greater than in the United States. On the other hand, the price differentials in Ontario in the case of asbestos bonded pipe are in some cases smaller and in any case fairly close to the price differentials for the same type of pipe in the United States. It must be borne in mind that in the case of all classes of pipe the basic Canadian price structure is higher than in the United States.

No explanation of the disparity between American and Canadian price differentials in coating medium and large size culverts is found in the verbal evidence, but references are made in various Armco documents to the much greater labour and heating costs involved in dipping large culverts compared with small ones. The documents indicate that in dipping operations large culverts had to be handled in shorter lengths than smaller ones. One document assumes the average length of 24" culverts as 16 ft. and of 60" culverts as 10 ft. for dipping purposes. While the costing basis which produces the price differentials for asphalt coating is not in evidence it is apparent that Armco in the United States has found it possible to relate the price differentials for asphalt treating galvanized culverts more directly to the size of pipe than has been done in Canada. Whether this indicates more efficient operations in the Ohio plant or a more arbitrary basis of pricing in Canada cannot be resolved from these data alone. In the light of the strong inferences from the evidence previously cited that prices of asphalt treated galvanized pipe in Canada have been arbitrarily established it is probably more than a possibility that costing on the basis of the most efficient method of operations has not been as rigorously followed in Canada as in the United States to secure the lowest prices of asphalt treated galvanized culverts. If the prices of asphalt treated galvanized culverts have been set at levels above those made necessary by the additional costs of asphalt treating the pipes, to this extent, have been set more in relationship to the price of the higher cost of asbestos bonded pipe similarly treated. It is true that in 1955 the price of asbestos bonded pipe in Canada was, for the first time, established at a level above that for asphalt treated galvanized pipe but, as already noted, the price differentials for the latter in the medium and larger sizes remained much higher than the differentials applying in the United States for similar pipe.

#### (iv) Uniform Tenders

Evidence taken in the inquiry clearly establishes that letting contracts by tender was practically unknown until two or three years before the inquiry, at which time departments of the federal government began to call for tenders on bulk quantities of culverts. Some municipalities and other purchasers have followed suit. Prior to that time the practice was for the large customers, viz., government, railways and municipalities, to be supplied with the manufacturers' current price lists, and to place orders against the list from time to time as pipe was required.

In 1954 there was a good deal of correspondence between officials and agents of Pedlar, and some intra company correspondence of Armco, Westeel and Corrugated Pipe dealing with several culvert tenders called for by the federal government in connection with the construction of Camp Gagetown in New Brunswick. On the first occasion identical bids were received and the contract was awarded to Armco. On the second occasion also identical bids were received. The Department threw out all the bids, calling for new tenders. Pedlar decided not to submit a new tender, but before instructions to this effect reached their agent, he put in a lower bid and Pedlar received the order. Shortly afterwards tenders for another contract were called for and this time Pedlar tendered at a price 36 cents per foot below their regular price. However that price apparently was 30 cents higher than Armco's tender and Armco obtained the contract. An intra Pedlar letter dated October 8, 1954 from Mr. J. T. Kellington to Mr. D. M. Coombs, dealing with this tender, contains the following:

"We were rather hurried in getting our letter of October 5 away to you, concerning the price which we wished you to quote on the latest tender call for this project. - It was our intention, either to talk to you on the telephone or to write you explaining our reason for quoting .36¢ per lineal foot below our present Dominion Government list for shipment into this area.

After some discussion in this office, as well as with others, it was decided that it would be useless to quote from the printed list, as the same situation would no doubt develop as on the tender called some time ago. In view of this, it was agreed that prices might be figured from cost, at least until the end of the year, on any inquiries originating at this particular point. The general opinion expressed was that all Dominion Government inquiries would eventually have to be treated in this manner, but that this could be discussed at a later date."

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If the 36 cent reduction in price was the result of "figuring from cost", as this letter suggests, then the practice of tendering from the published price lists, which appears to have been the cause of identical bids, resulted in higher prices to the customer than would have prevailed in the absence of uniform price lists. It is of some significance that among the manufacturers with which this inquiry is concerned, tenders for Camp Gagetown contracts at prices below the published list only appeared after the Department of Defence Production had thrown out a set of identical tenders.

An intra Armco letter dated January 8, 1955, mentions that in the previous year on tenders called for by the E. I. D. (Eastern Irrigation District) of Alberta, bids from four companies, all alike, had been received.

In May 1955 the Pacific Great Eastern Railway called for tenders for a large quantity of culvert pipe of several sizes. Four companies in Vancouver submitted identical bids, which were thrown out and new tenders called for. Several additional bids were made in response to the second call, including one from England and one from the United States. The American bid was substantially the lowest and was successful. All four companies that had submitted identical tenders in response to the first call, viz., Armco, Pedlar, Rosco and Westeel, also tendered on the second call. This time their prices differed, and three of them were lower than the earlier uniform bids, after adding the 5 per cent provincial tax which had not been included in the first tenders. Westeel's second tender was exactly equal to its first tender, plus 5 per cent. It thus appears that even without tenders from other companies, lower prices were obtained on the second call.

As mentioned in an earlier chapter of this report the manufacturers desired that the published price lists should be adhered to in submitting tenders and made some efforts to achieve this end. From the foregoing examples the Commission has formed the opinion that in so far as contracts were obtained on this basis, the prices were higher than would otherwise have been the case. This detrimental result to the purchasers corresponds with what economic theory expects to flow from a practice of uniform tenders.

Counsel for Armco argued that the sudden development of letting contracts on tender had caught the company unprepared to place a figure on a particular job. For years Armco had stayed by its published list prices, and when tenders began to be called for Armco simply bid its list price. Other companies bid their list prices and as these were the same as Armcos, the initial result was that tenders at the same price were received by one or two customers. He further argued that the metal culvert manufacturers had learned their lesson from the Pacific Great Eastern tender and that it was hardly likely the practice had continued.

In the Commission's opinion the evidence supports the view that the manufacturers desired that all of them would submit tenders on the basis of their uniform published lists, and it seems unlikely that when first asked to tender on bulk contracts each of them would, individually and without any knowledge of what other companies were doing, automatically adopt that practice. Subsequently, instances did occur in which bids at different prices were submitted, e.g., the 1954 Camp Gagetown tender mentioned above in which Pedlar reduced its price 36 cents below list, but Armco submitted a price 30 cents lower still. It

should be noted however that the first tenders on the P. G. E. contract were not called for till May 1955 and that all the bids were identical. Oral evidence suggests that some of the metal culvert manufacturers may have abandoned the practice of submitting uniform tenders, but on the evidence as a whole the Commission cannot determine whether this is true for the industry.



## CHAPTER VI

### CONCLUSIONS AND RECOMMENDATIONS

#### 1. Conclusions

The metal culvert manufacturers with which this inquiry is concerned share, among them, almost all the metal culvert business in Canada. In each of the five years 1950 - 1954 inclusive, their combined production was over 97 per cent of total Canadian production. Imports of metal culverts, apart from a few specialized items, are negligible. In the sale of metal culverts these manufacturers have followed for a great many years the practice of having a rigid and uniform system of prices, common to them all. This system of uniform pricing appears to have been maintained because of the desire of individual manufacturers to avoid competition on a price basis and their readiness to adopt common practices and prices which, while perhaps not satisfactory to every manufacturer in every respect, were regarded as a necessary basis for an effective arrangement, and which provided that degree of confidence in the group to secure their general observance. The effects of the uniform pricing system have been traced in a number of aspects in the evidence which has been reviewed and appraised in the preceding chapters of this report. The dangers to the public interest which arise when a system of pricing is insulated from the competitive striving of rival manufacturers seeking to advance their businesses have been apparent in the various situations which have been described as well as in the general tendencies which are reflected in the specific instances of common pricing.

The general effect of the uniform pricing of metal culverts has been to foreclose to purchasers of culverts all opportunity to buy supplies at prices which bear a direct relationship to actual costs involved. For many years some of the principal purchasers of metal culverts, such as townships and municipalities, have been required to pay the same unit price for a carload of pipe as for a single length. For a time carload and less than carload prices were offered to provincial governments but in very recent years only a single price has been available. For most of Canada, also, a purchaser paid the same price for metal culverts whether he was situated in the same locality as a culvert factory or whether he wanted the culverts delivered at places several hundred miles from a culvert factory. For classes of customers, other than railways, the price of couplers was averaged in with the price of the pipe itself, although the number of couplings required for a particular job would vary with the length of pipe used and the number of lengths which had to be joined together. This practice, according to Mr. Campbell, was followed because customers such as municipalities desired an all-inclusive price (Evidence, pp. 285-6). However, the determination of price and the averaging of the cost of couplers did not result from the

independent decisions of individual manufacturers but from agreement among suppliers as to the terms on which supplies would be sold. The customers, under such conditions, cannot turn to an alternative source of supply in an endeavour to arrange their orders so as to benefit from any saving in costs.

The manner in which prices of metal culverts have been accommodated to the operations of certain manufacturers so as to take account of less efficient methods of production, as in the case of pipe arch, indicates the readiness with which the interests of consumers and the stimulus to efficiency are subordinated to the objective of maintaining a non-competitive basis of pricing. If prices were determined on a competitive basis the influence of the costs of the most efficient methods of production and distribution would come to bear directly on the market and there would be greater likelihood of the public receiving the benefit of less costly methods by whatever manufacturer they might be introduced. We are, therefore, of the opinion that the common pricing arrangements which have been followed in the metal culvert industry have detrimental effects and are contrary to the public interest.

On the principal aspects of the inquiry the conclusions reached by the Commission may be summarized as follows:

- (a) Over the years the manufacturers with which this inquiry is concerned have published price lists which, with very minor exceptions in the case of one manufacturer, contained identical prices for the same type and size of culvert to the same class of customer in the same price area. In the great majority of cases sales have been made at list prices by all companies and departures from list prices have been very much the exception. Some competitive pricing has appeared in the last two or three years prior to the inquiry, particularly in 1955, in submitting bids on calls for tenders. It is not possible from the evidence to determine the amount of the trade in metal culverts which has been affected by this development but it is clear that up to the time of the inquiry the general practice of selling at uniform prices had not been affected to any substantial extent.
- (b) Uniform price lists and their observance have not resulted from other manufacturers simply following the price leadership of Armco, the largest and most dominant manufacturer. They have resulted from meetings, discussions and agreements on prices.
- (c) It follows that there has been very substantial interference with price competition and the public has been deprived of the benefit which might normally be expected to flow from such competition in a free enterprise economy.

- (d) Competition from other materials, particularly concrete, has been a constant concern of the metal culvert manufacturers, who were continually endeavouring to secure for their product a larger share of the total culvert market. However, the demand for the two products, metal culverts and concrete culverts, is affected differently by many considerations other than price. Consequently, while the metal culvert manufacturers have not been able to ignore price in their competition with concrete manufacturers, there has been a noticeable margin within which the price of metal culverts could be changed without affecting the demand for metal vis-à-vis concrete. Therefore concrete competition, while always present, has not been effective in the economic sense in preventing any advantage being taken of a monopoly position. In other words, competition from concrete has not negated the possibility of public detriment under the circumstances disclosed in this inquiry.
- (e) In the opinion of the Commission the following situations which resulted from the arrangements to maintain uniform prices have been detrimental to the public:
- (i) Instances occurred in which a company agreed to raise prices to meet the desire of other companies, at a time when if it had acted in accordance with its own judgment no increase would have been made. Very few such instances are on record and their direct effect on prices may not have been of great significance, but they illustrate the effect of arriving at prices by "give and take" among competitors rather than by the independent action of suppliers competing on the basis of price as well as in other aspects of distribution.
  - (ii) The delivered price policy, which by common arrangement has been followed in most provinces, has resulted in price discrimination on a substantial scale among customers of metal culvert manufacturers. The practice of including average transportation costs in selling prices means, roughly, that the purchasers of half the tonnage of metal culverts transported have had to pay more than the actual freight costs on their shipments while purchasers of the other half have paid somewhat less. Individual customers were afforded no opportunity to arrange their deliveries in any other way which might have afforded a saving in freight costs, because the charge for transportation was already included in the price. The delivered price system, in an industry such as metal culverts in which

transportation charges are an important element in the final cost to the purchaser, may be expected to add to the transportation costs borne by the consumer rather than encourage the most economical forms of delivery. The practice of having a single price, regardless of quantity, which is the practice in the industry, results in further discrimination among customers in that those who purchase in quantities sufficient to reduce unit transportation costs thereby contribute toward the cost of delivery to those customers who buy in small quantities.

The delivered price system inevitably involves some cross-hauling when plants situated in different locations make shipments into areas which can be served more economically from a near-by plant. The extent of such cross-hauling cannot be determined from the evidence in the inquiry but the instances which are found in the evidence indicate that it is by no means insignificant. To the extent that it exists it occasions an increase in transportation costs above that which would result from the most direct shipments and may be expected to be reflected in the prices charged by the industry.

- (iii) The price of pipe arch produced by Armco's patented re-forming process was kept at a level above that which was necessary in order to permit other manufacturers who used more expensive methods to continue in the pipe arch field. Mr. E. L. Campbell's statement that at first they had no real knowledge of what arching costs would prove to be, and that the price was based on the greater drainage value of pipe arch in comparison with round pipe, may simply mean that the company was then making full use of the advantage afforded by its patent rights. It seems clear, however, that subsequently Armco knew its charges for arching pipe were high and tried to get the other companies to agree to lower charges. Mr. E. L. Howes referred in his evidence to one instance in which he succeeded in getting a reduction. Letters of both Mr. Campbell and Mr. Howes and one letter of Mr. H. M. Lloyd (Armco, Guelph) establish, however, that in the years 1950 to 1952 arching charges were still definitely too high and were being maintained at a high level to satisfy the other companies, whose arching methods were more expensive.

Mr. Campbell's and Mr. Howes' evidence is to the effect that they wished to have other manufacturers

making pipe arch because that would increase purchasers' acceptance of metal vis-à-vis concrete and would widen the market for pipe arch. The Commission accepts this as an Armco objective, but considers that if it was its only or paramount objective the most effective means of attaining it would have been to license the other Canadian manufacturers at that time, thereby gaining an even wider market through the medium of lower prices. In fact the first Canadian manufacturer was licensed only in 1954. Mr. Campbell's statement that this lengthy delay was due to patent problems does not, in our opinion, tell the whole story, when we remember that in the United States three or four companies were licensed for pipe arch as early as 1944 or 1945 and fourteen or fifteen more by 1949 or 1950. At the time of the hearing Mr. M. C. Patton stated there were at least thirty-five licensees in the United States.

- (iv) Uniform quotations on tenders, on the basis of published price lists, of which we have evidence in 1954 and 1955, caused public detriment through higher prices than would otherwise have occurred. In those years, however, there is definite written evidence that the practice had not always been adhered to, and oral evidence of other cases of competitive price bidding. Although the practice of quoting only published prices on tenders may no longer be consistently followed by all metal culvert manufacturers the variation in this aspect of the arrangements will have limited competitive results as long as the general basis of uniform prices remains the common policy.
- (f) The Commission is not satisfied, on the evidence, that the the price of plain galvanized pipe, coated or coated and paved, was raised to that of asbestos bonded pipe, coated or coated and paved, rather than the reverse. It appears, however, that price differentials for galvanized coated or coated and paved pipe in medium and large sizes have been maintained at much higher levels in Canada than those applying in recent years in the United States.
- (g) In the opinion of the Commission the duties of Mr. Thomas Sill in connection with the Western Section were of a clerical and administrative nature and he should not be held responsible for any arrangements or practices between the manufacturers. He always acted on instructions and had no part in making policy decisions.

- (h) Corrugated Pipe, Robertson-Irwin and Pounder, three of the smaller manufacturers, co-operated with the others by adopting prices uniform with theirs. However, they played a very small part in the arrangements concerning prices. None of them seems to have initiated policy proposals.

## 2. Recommendations

In view of the conclusions reached by the Commission as to the detrimental effects of the practice of establishing and maintaining uniform prices over a period of many years, by agreement among manufacturers producing nearly all the metal culverts made in Canada, the following recommendations are made:

- (a) That the Western Section of the Metal Culvert Council or group of Western Culvert Representatives be dissolved.
- (b) That there should be abandonment by manufacturers in the metal culvert industry of discussions between them at meetings or otherwise of prices, terms and conditions of sale or any other aspect of price.
- (c) That because the long history of uniform pricing in this industry requires a clean break with former practices if competitive conditions are to be restored, particularly in relation to price, none of the manufacturers affected by this inquiry should supply their culvert price lists to other metal culvert manufacturers or follow any other system of exchanging price information.
- (d) That discussions, communications or other means designed to result in the submission of uniform bids on calls for tenders be terminated, if they have not already been abandoned.
- (e) That if necessary to secure compliance with these recommendations an injunctive order for that purpose be applied for from a court of competent jurisdiction.

In addition to the foregoing recommendations the Commission has considered the situation created by the delivered price system (which prevails in all provinces except British Columbia) in this industry. Certain detrimental effects have been referred to. While there is no direct evidence on the point, the Commission believes the system was introduced and continued for so many years chiefly as a useful and probably essential device to secure adherence to uniform prices. If we are correct in this belief, the discriminations inherent in this delivered price system were not sought for their own sake, but were simply incidental to the system. A second purpose of the system

was probably to widen the market for metal culverts in places at a considerable distance from the manufacturing plants, but any extension of markets in this way was, of course, secured at the expense of purchasers more favourably located with respect to manufacturing centres. Some consumers may have considered that the system had the advantage of offering several sources of supply since all manufacturers would deliver at the same price at any place in the same pricing area, regardless of the location of the manufacturing plant. However, the advantage arising from the system was limited to things like service and delivery, since the culverts produced by all manufacturers were largely interchangeable and the prices of all were identical. The advantage in this direction was obtained at the cost of higher charges for transportation.

Although, as mentioned in Chapter V, the Director made no allegations against the delivered price system in the metal culvert industry, we are of the opinion that the disadvantages to consumers which result from the system as it has operated in this industry make it desirable, in the public interest, that alternative methods of purchasing culverts should be made available. Such a development would tend to encourage the use of the most economical methods of transportation and could be expected to bring to consumers some benefit in the way of lower prices made possible by quantities purchased or by savings in transportation costs.

The offering of f.o.b. prices as one alternative to delivered prices should be feasible in the rest of Canada, just as it is in British Columbia, and the opportunity for consumers to buy on a f.o.b. basis would assist in restoring competitive pricing to this industry.

(Sgd.) C. R. Smith

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Chairman

(Sgd.) A. S. Whiteley

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Member

Ottawa,  
July 24, 1957









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